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OBJECTS AND PLAN

OF THE

National Association of Wool Manufacturers:

ITS ORGANIZATION, ARTICLES OF ASSOCIATION,

AND BY-LAWS.

BOSTON:

PRESS OF JOHN WILSON AND SONS. 1866



OBJECTS AND PLAN

OF THE

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ITS ORGANIZATION, ARTICLES OF ASSOCIATION,

AND BY-LAWS.

BOSTON:
PRESS OF JOHN WILSON AND SONS.
1866.

At a meeting of the Government of the "National Association of Wool Manufacturers," held at Boston, Dec. 21, 1864: — "on motion of Mr. N. Kingsbury, it was —

"Voted, That the President be requested to prepare and print a statement of the objects and plan of the Association, with such explanations and remarks as he may deem appropriate; appending thereto an account of its organization, its Articles of Association, and By-Laws, a list of its Officers and Members, and the proceedings of this meeting; and that he transmit copies of the pamphlet to the several members of the Association, and to such other persons as he may think likely to take an interest in the cause."

STATEMENT.

TO THE MEMBERS OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

AGREEABLY to a vote of the Government of the Association, I send you, with its Constitution and By-laws, an account of its organization, a list of its officers and members, and the proceedings thus far of its Executive Board. It is in accordance with the same vote, that I respectfully ask your attention to a few preliminary remarks on the character and purposes of the Society which we have just formed.

Knowing, as all men know and acknowledge, that union is strength, nothing is more natural than that those who are devoted to the same pursuits, and whose interests are, by consequence, essentially alike, should endeavor to avail themselves of the evident advantage which belongs to associated action. If our countrymen engaged in the manufacture of wool have been somewhat slow in coming to this point, the delay may be ascribed, in part at least, to the depressed and precarious condition, in time past, of this particular industry. For a good many years it was under the necessity of contending, with very unequal strength, against a foreign competition most active and vigilant, and enjoying all the advantage which belongs to abundant capital, to low rates of interest, low-priced labor, skilled and concentrated action, and longestablished business connections. Meanwhile the national legislation, which alone could enable our American producers to prosecute the contest on terms of comparative equality,

was often unfriendly and always uncertain. With no relief from Government, and with faint hope of it, scattered widely over the country, and knowing very little of each other, exhausted and discouraged in the struggle to keep their own heads above water, we can hardly wonder that the wool manufacturers neglected so long to adopt measures for acting in concert.

Of late, as I am happy to acknowledge, there has been a change greatly for the better; and we may rejoice at it, not merely that one class in the community is reaping the just reward of its exertions, but because every real advance made by one producing interest is just so much added to the strength and well-being of the nation. This improvement in the woollen interest of the United States had begun before the breaking-out of the Rebellion. The Morrill Tariff, so naturally assailed by our foreign rivals, and so mistakenly condemned by many nearer home, will hereafter be gratefully acknowledged as a most important step in the progress of American manufactures. And, while the immense aid, which, in the progress of a gigantic contest, has been rendered to the nation by its productive industry, cannot fail to make the value and importance of that industry more generally felt, the vast financial exigencies which the conflict is imposing upon us naturally involve the continuance of friendly legislation.

Having been commenced under such circumstances, the present movement of the wool manufacturers may justly be regarded as timely and auspicious. That its action may be judicious, and its results beneficial, it is undoubtedly desirable that the objects and aims of our Association should be rightly understood, not only by those who are connected with it, but by all who may take an interest in its operations.

I have already alluded to what may be regarded as a primary motive in every society formed among men. Unquestionably, we combine our efforts in order to make them

more efficient. We intend, and we expect to accomplish, a good deal more in this way than we could possibly accomplish by separate, individual action. We hope and we mean to make ourselves known as a power in the community, but by no means as a power to be dreaded. At the very outset, and with perfect sincerity, we disclaim the intention of assuming an attitude in any respect antagonistic to other great inter-It is, indeed, one leading object of our combination, that through it we may be enabled to work more understandingly, more harmoniously, more successfully with others, and especially with those whose pursuits are more or less con-We believe that there can be no greater nected with our own. mistake than to suppose, that any of the great industries of the country are opposed to each other, either in interest or policy. We trust that it will be an early, a constant, and a cherished object of the Association to promote harmony and co-operation among the different classes of American producers.

As another good result of our combination, we may hope that it will supply, to some extent, that want of concentration which has always been a serious disadvantage to the wool manufacturers of our widely extended country. The aid which concentration gives in the prosecution of every kind of business is too obvious and too well known to call for much clucidation. Through the mere proximity of those who are engaged in the same or similar pursuits, the results of specific knowledge and experience are constantly accumulated, and readily imparted. In such a community may always be found the men, the material, and the implements which its own specialty requires. Of the advantages thus conferred we might adduce many instances. It was this which gave to New Bedford, in the days of the whale-fishery, advantages for its prosecution that were possessed by no other place; and to the same fact is due the superiority of the shoe business, as conducted in Boston and its vicinity,

over the same interest wherever else it has been tried. lar examples are furnished by some of our own great centres of cotton manufacture. But in England the principle has been much more fully tested. No one need be old that it is to skill in the working of metals that Birmingham and Sheffield owe their wealth and greatness; that Manchester is one vast workshop for cotton; or that Leeds, Halifax, Huddersfield, and Bradford are devoted almost exclusively to the manipulation of wool. These results cannot be regarded as If there be any one thing which our British competitors fully understand, it is the business of manufacturing; and their practice in this respect shows what importance they attach to the principle of concentration. facilities which they enjoy for carrying it into effect - facilities due, partly at least, to their insular position and small extent of territory - must be reckoned as not the smallest of those positive advantages on their side, against which we, as manufacturers, have had to contend.

The beneficial influences of nearness and contiguity being so great and so manifest, we may expect that they will be more and more sought and secured among us, as the great manufacturing interests of the country become increasingly strong and stable. Meanwhile, let us do what we can to remedy the inconveniences and disadvantages resulting from our isolated and dispersed condition. And here let me remind you, that a very important object of the Association is the collection and diffusion of information on all those subjects in which we as manufacturers are particularly interested. Since we cannot see for ourselves the actual operations of our fellow-laborers in the field; denied, as we are, the pleasure and advantage of personal intercourse and mutual impartation of successful and unsuccessful experience, - we propose to use the next best agency within our reach, that of intercommunication through associated action.

As one means of accomplishing this, we are to have a

SECRETARY,—a paid and permanent officer, whose time and talents will be devoted to the interests of the Association. The duty of receiving and collecting information on all matters of moment to the members, and the task of selecting, arranging, publishing, and diffusing the same, will, of course, devolve on him. To his office, as a central point, the various streams of intelligence will naturally tend, only to flow out again to the furthest limits of the Association.

In harmony with the duties of this officer, and destined, I hope, to prove largely auxiliary to them, I may mention the Committees.

Special Committees will be appointed on particular subjects, as occasion may require; while three of our Standing Committees will be permanently devoted to the objects of the Society.

We have, for instance, a Committee on STATISTICS. No one will contend that a business like ours can be profitably or safely conducted without constant and accurate information of the kind, which it is the province of this Committee to collect and supply.

It is equally certain that the whole subject of MACHINERY is one of paramount importance to the manufacturer. Amid the multitude of new inventions, proposed improvements, and alleged discoveries, it is easy to see how useful to him may be the investigations and reports of an intelligent and experienced Committee.

Not less important than the instruments we use, is the MATERIAL on which we operate; and here will come in the valuable contributions of another Committee, to which is assigned the duty of "taking into consideration the origin and extent of the various raw materials used by the wool manufacturers of the United States, especially the supply and consumption of wool, the amount and character of the home growth, and the means best calculated to increase and diversify it."

No argument is needed to show, that able and intelligent men on these Committees - experts in their particular departments — will possess opportunities and advantages for the acquisition of information far beyond those which are enjoyed by any individual manufacturer. By the judicious application of a principle well understood, - to wit, the division of labor, - they will be enabled not only to extend their inquiries over a wide field, but to make them exact and thorough; and I cannot but anticipate, from their investigations and reports, results of great value, not only to the members, but to the whole community. I think, gentlemen, you will readily perceive, that information so useful and so authentic, frequently distributed among all the members of our Association, will serve, in some measure, as a remedy for the inconveniences which we all experience, though in different degrees, from our want of nearness to each other.

To the same desirable end will our fraternity conduce, just so far as it shall, in any way, promote acquaintanceship and intercourse among those who avail themselves of its membership. From its catalogue we may, at least, know who our associates are, and where they are to be found. The annual meetings will enable the manufacturers to become personally acquainted, and, opening the way to conversation and correspondence, will present many opportunities, that might not otherwise occur, for collecting the results of their respective experience.

There is another way in which the Association may, if it chooses, provide a medium of communication and a repository of facts of practical application. I refer to the addition of a department, in connection with the office of the Secretary, for receiving and imparting intelligence; where those who seek and those who give employment may hear of each other; where those who make and those who use machinery may learn each other's wants; and to which those who furnish and those who work up the raw material could

alike resort, and with marked advantage. I say the Society may have this facility, if it see fit. It implies some additional expense. It involves the employment of a special clerk or agent. That its benefit would well repay us for the moderate outlay, I have no doubt.

As our success in carrying out what is legitimate and practicable must depend somewhat on right understanding of what we can and what we cannot do, I may be permitted here to suggest, that this Association is not a combination among the manufacturers of a particular class, to fix the prices of their fabrics, or to control the markets. Probably there are very few among us who have thought so little on the great laws of trade, or who know so little of human nature, as not to see that any such attempt would bring confusion into business, and, in addition to the odium which it would devolve on its authors, would be ultimately injurious to their interests. Let us not forget, however, that there is a way in which the operations of our Society may have a natural and a wholesome influence on the course of trade. Just so far as it shall aid in ascertaining the exact condition of the demand and the supply, and in keeping the producer constantly acquainted with the actual relations of those two important quantities, will it contribute to the normal and healthy adjustment of the same.

I would add, also, that it does not come within the scope and design of our union to employ its power as an Association, either in furthering or opposing any merely private schemes or interests. It is easy to conceive, that objects of this kind may present themselves, in regard to which a large majority of the Association would think alike, and which they might strongly wish either to promote or to discourage. We can but hope, that any such temptation to a precedent full of danger and mischief will be promptly repelled.

I have mentioned the advantages, in respect of information upon topics connected with our own business pursuits, which members of the Association may hope to receive through its appointed agencies. I think it is reasonable to expect, that these benefits will, at times, extend beyond the circle for which they are primarily intended; and doubt not that the heads of departments at Washington, Committees and Members of Congress, when about to report or to legislate on matters connected with the woollen manufacture, will avail themselves of the information which it will be in our power to impart, and which is not likely to be accessible through any other channel.

I have already alluded to the friendly attitude which this Society assumes in the outset, and wishes ever to preserve, towards the other great interests of the country. It is our belief that the important industries of the nation will most effectually promote their own advantage and the public prosperity, by moving hand in hand in regard to those questions of national policy which affect the condition and prospects of the working and producing classes. The opposition of interests, which has sometimes been thought to exist between men whose pursuits are different and yet allied, - as between those, for instance, who grow a raw material and those who manipulate it, — is, I believe, always imaginary, and cannot fail to disappear under a careful consideration of principles So far as our Society, by its action or by its bearing, shall contribute to the removal of misapprehension and prejudice, the result will be gratifying to us all.

For the successful accomplishment of our objects, it is desirable that our membership should be large, and that the spirit already manifested should be cherished and sustained. Our Association, like all other leagues among men, must owe its strength and its success as well to numbers as to a zealous co-operation. By increasing our membership, we enlarge not only the field of our usefulness, but the means for its cultivation. For such augmentation, our reliance must be mainly on the personal aid and influence of those who have already

joined us. The subject is specially commended to your attention; and, to facilitate the nomination of candidates, a form of the notice required by our By-laws will accompany this pamphlet.

In this brief outline of our objects and aims, I am far from professing to cover the whole ground. Indeed, it is not improbable that occasions for action, and modes of operation, may yet come up, which none but a prophet could now foresee. Suffice it for the present, that there is enough before us to employ whatever energies the Association may possess.

Respectfully,

E. B. BIGELOW,

President.

ORGANIZATION.

THE want of some organization capable of united and systematic action has long been felt among those who are engaged in the woollen manufacture. With a view to supplying this deficiency, or, at least, to ascertain the opinion and wishes of those who are most directly interested in the matter, the following Circular was issued last summer.

CIRCULAR.

You are invited to meet the undersigned at the Massasoit House, in Springfield, Mass., on Wednesday, the fifth day of October next, at 12 o'clock, m., for the purpose of consultation, and, if it should be thought advisable, of forming a National Association of Woollen Manufacturers, for our mutual interest and advantage.

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EDWARD HARRIS										Woonsocket, R.I.
STEPHEN T. OLNEY, Treasure										
JOSHUA STETSON, Treasurer \										Boston, Mass.
WALTER HASTINGS, Treasures										" "
T. QUINCY BROWNE, Treasure									Ī	
C. L. HARDING, Treasurer Lo										" "
J. WILEY EDMANDS										" "
E. B. Bigelow										"
A. C. Russell, Agent Berksh										Gt. Barrington, Mass
T. CLAPP, JUN., Agent Ponto	me	~ 'V	V~	1112		γ. Μ.,	6	٠,	٠.	
Pittsfield Woollen Co										I Ittaneiu, mass.
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TACONIC MILLS										" "
LEONARD & VAN SICKLER .										,, ,,
L. Pomeroy's Sons										" "
D. & H. STEARNS										" "
Peck & Kilbourn										,, ,,
J. BARKER & BROTHERS										,, ,,
S. N. & C. Russell						•				,, ,,
HENRY COLT										"
J. Z. & C. GOODRICH & Co.										Stockbridge, Mass.
BLACKINTON & PHILLIPS										South Adams,
F. W. HINSDALE & BROTHER										Hinsdale, ,,
MESSINGER & WRIGHT	•		-	-						Worcester, "
CHAMBERLIN & BURROUGH .	·	Ċ								•
J. H. Perry's Sons	•	•	•	٠	•	•	•	•	•	Wohaton
U. 12. I BREEL D CORD	•	•	•	•	•	•	•	•	•	webster, ,,
AUG. 10, 1864.										

In response to this call, a large number of the leading wool manufacturers of the country assembled at the time and place above designated. These representatives of a great producing interest came from Ohio, Pennsylvania, and New York,—from New Jersey, Maryland, and Delaware,—and from each of the six New-England States.

The Convention was organized by choosing THEODORE S. FAXTON, of Utica, N.Y., President; J. L. PECK, of Pittsfield, Mass., Secretary; and GEORGE MAXWELL, of Rockville, Conn., Assistant Secretary.

Many gentlemen addressed the meeting, with strong expressions of interest in the cause, and with but one opinion as to the importance and desirableness of the object which had brought them together. The actual magnitude of the woollen interest in the United States, its rapid rate of increase, and its inevitable requirements in the future, were well presented in the course of the discussion, and commanded the entire assent of the assembly. The Convention then resolved unanimously that it would proceed to the formation of a National Association of Wool Manufacturers; those who were present pledging themselves to become members of the same.

To carry this resolution into effect, a Committee of eleven was appointed to prepare a plan of organization, and report at an adjourned meeting of the Convention, to be held at the same place, on the 30th of November following. The members of this Committee were—

- E. B. BIGELOW, Boston, Mass. EDWARD HARRIS, Woonsocket, R.I. T. S. FAXTON, Utica, N.Y. N. KINGSBURY, Hartford, Conn. THEO. POMEROY, Pittsfield, Mass. S. WOODWARD, Woodstock, Vt.
- J. WILEY EDMANDS, Boston, Mass.
- J. W. STITT, New York, N.Y.
- S. Blackinton, Adams, Mass.
- J. J. ROBINSON, Rockville, Conn.
- H. H. CHAMBERLIN, Worcester, Ms.

There was a full and even increased attendance at the adjourned meeting. The Report of the Committee was read

and accepted. The Convention was then dissolved; and its recent members proceeded to organize an Association, by adopting the Articles and By-laws which had been presented by the Committee, and by choosing officers, as therein prescribed.

ARTICLES OF ASSOCIATION.

Whereas the manufacture of wool constitutes an important branch of national industry, largely involving the labor and capital of the country; and whereas its future growth and permanent success require greater co-operation, on the part of those engaged in it, than has heretofore existed,—

Therefore, we the subscribers, for the purpose of promoting more effectually, by all appropriate means, the advancement and prosperity of the woollen interest, agree to associate ourselves together under the name of "The National Association of Wool Manufacturers," and be governed by such rules and by-laws as the Association may from time to time adopt.

BY-LAWS.

Section I.

Members and their Election.

1. All persons whose names are enrolled as members of the Conventions of Wool Manufacturers, held at Springfield, may become members by subscribing the Articles of Association.

- 2. From and after the adoption of these By-laws, members shall be elected only at meetings of the Government; and no person shall be eligible to membership, who is not proposed for election by some actual member, by written notice to the President or Secretary; and no person shall be admitted, if five or more negatives are given against him.
- 3. The Government, at any duly organized meeting, may elect corresponding and honorary members by the unanimous vote of the members present.
- 4. Each person admitted as a member of the Association, except corresponding and honorary members, shall pay to the Secretary the sum of twenty-five dollars as an admission-fee.
- 5. Every member shall pay in advance an annual assessment of twenty-five dollars to the Secretary, in addition to the admission-fee; and, upon the refusal or failure by any member to pay such assessments, his name shall be presented to the Government; and, upon their vote, be struck from the list of members.
- 6. Any member who shall have paid his assessments in full may withdraw his membership, by giving written notice thereof to the Secretary.

SECTION II.

Officers and their Election.

- 1. The officers of the Association shall consist of a President, three Vice-Presidents, a Secretary, a Treasurer, not less than thirty nor more than fifty Directors, and the members of the Standing Committees hereinafter designated, who together shall constitute the Government of the Association; and nine of whom shall constitute a quorum for the transaction of business.
- 2. The Government shall have power to hold meetings at such times and places as they may think proper; to appoint

Committees on particular subjects, from the members of the Government, or from other members of the Association, with full powers to act on such Committees as though members of the Government; to appropriate the funds of the Association; to print and circulate documents, and publish articles in the newspapers; to carry on correspondence, and otherwise communicate with other associations interested in the growth or manufacture of wool; to employ agents, and to devise and carry into execution such other measures as they may deem proper and expedient to promote the objects of the Association.

- 3. After the first choice, all the officers of the Association, except the Secretary, shall be annually elected by ballot, at the annual meeting, at such place as the Government may appoint, a majority of the members present being necessary to constitute an election; and they shall continue in office for the term of one year, or until their successors are elected, and qualified to take their places.*
- 4. The Government of the Association shall choose the Secretary, and fix his salary; and may fill any vacancies occurring in their own body, after the annual election, by death, declination to serve, resignation, or any other cause, at any regular or special meeting at which a quorum shall be present.

SECTION III.

Meetings of the Association.

1. There shall be an annual meeting of the Association, for the choice of officers, and the transaction of other business,

This section was amended at the Annual Meeting in September, 1865, by striking out the following proviso, existing in the original By-Laws:—

[&]quot;No person shall be eligible for the office of President or Vice-President for more than three years in succession; and five of the Directors, and one member of each of the Standing Committees, shall retire each year, in the order of every tenth one of the former and the last one of the latter, as their names shall stand on the balloting list."

on the first Wednesday of October,* at such place as the Government may appoint; and notice of such meeting, signed by the Secretary, shall be mailed to the address of each member, at least ten days before the time fixed for the meeting.

2. Special meetings may be called by the Government, or upon the written application of twenty members not in the Government, to the Secretary; notice thereof to be given in the same manner as for the annual meetings. It shall require twenty members present at any meeting, to form a quorum; and, in case of there not being a quorum, the meeting may be adjourned by the presiding officer.

SECTION IV.

Duties of Officers.

- 1. It shall be the duty of the President, or, in his absence, of one of the Vice-Presidents, in the order of seniority, to preside at all meetings of the Association and of the Government; and the President, or one of the Vice-Presidents, shall audit and sign the annual accounts of the Treasurer.
- 2. The Treasurer shall keep an account of all moneys received and expended for the use of the Association, and shall make disbursements only upon vouchers approved in writing by the Secretary, and any member of the Committee on finance. When his term of office expires, he shall deliver over to his successor all books, moneys, and other property; or, in the absence of the Treasurer elect, the same shall be delivered to the President.
- 3. It shall be the duty of the Secretary to give notice of, and attend, all meetings of the Association, and of the Government, and to keep a record of their doings; to conduct all correspondence, and carry into execution all orders, votes, and resolves, not otherwise committed; to keep a list of the

[•] The time for annual meeting changed from September, as originally provided.

members of the Association, collect the assessments, and pay them over to the Treasurer; to notify officers and members of the Association of their election; to notify members of their appointment on Committees, furnish the Chairman of each Committee with the copy of the vote under which the Committee is appointed, and, at his request, give notice of the meetings of the Committee; to prepare, under the direction of the Government, an Annual Report of the transactions and condition of the Association; and, generally, to devote his best efforts to forwarding the business, and advancing the interests, of the Association.

SECTION V.

Standing Committees

1. There shall be four standing Committees, viz.: -

A Committee on FINANCE,

- . . STATISTICS.
- " " MACHINERY,
- " " RAW MATERIALS:

each to consist of five members, and act under the direction of the Government.

- 2. The Committee on Finance shall have the general superintendence of all matters of finance connected with the Association; and one or other of the members thereof shall give his written approval to all vouchers of expenditure, in order to their payment by the Treasurer.
- 3. The Committee on Statistics shall inquire after and collect statistical information relating to the manufacture of wool, especially such as will tend to show the progress of its various branches, both at home and abroad, and report the same to the Government of the Association.
- 4. The Committee on Machinery shall investigate new inventions and improvements relating to the manufacture of

wool in any of its departments, which may from time to time be made public, and report thereon to the Government.

- 5. The Committee on Raw Materials shall take into consideration the origin and extent of the various raw materials used by the wool manufacturers of the United States, especially the supply and consumption of wool, the amount and character of the home growth, and the means best calculated to increase and diversify it, and report the results of their investigations to the Government.
- 6. The reports of the several Committees provided by this section shall be printed, and copies thereof sent to each member of the Association.

SECTION VI.

Amendment and Repeal.

1. These By-laws may be amended or repealed by a vote of two-thirds of the members present at any duly organized meeting of the Association, provided notice of such proposed change shall have been presented, in writing, at a previous meeting.



REPORT d. (/and

Committee on Grganization

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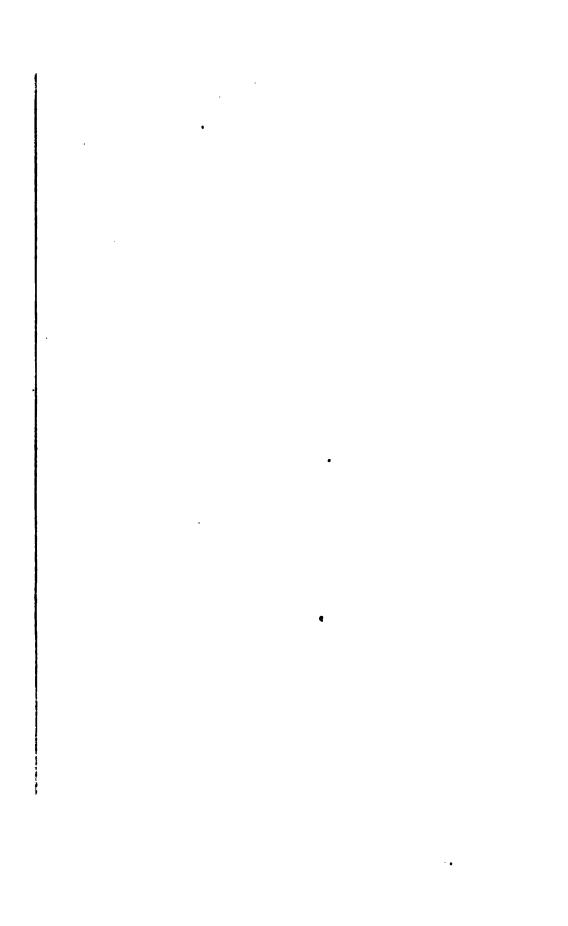
CONVENTION OF WOOL MANUFACTURERS, 11-8

HELD AT SPRINGFIELD,

Ост. 5, 1864.

BOSTON:

PRINTED BY JOHN WILSON AND SON, 15, WATER STREET. 1864.



TO THE

CONVENTION OF WOOL MANUFACTURERS.

_ ___ _ _ .

THE Committee appointed to devise a plan of Organization for a NATIONAL ASSOCIATION OF WOOL MANUFACTURERS, to be acted upon at your Adjourned Meeting, the 30th instant, respectfully report the annexed Articles of Association and By-Laws.

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E. B. BIGELOW . . . BOSTON, MASS.

RDWARD HARRIS . . WOONSOCKET, R.I.

T. S. FAXON . . . UTICA, N.Y.

N. KINGSBURY . . . HARTPORD, CONN.

THEODORE POMEROY. PITTSFIELD, MASS.

SOLOMON WOODWARD. WOODSTOCK, VT.

J. WILEY EDMANDS . BOSTON, MASS.

J. W. STITT . . . NEW YORK, N.Y.

8. BLACKINTON . . ADAMS, MASS.

J. J. ROBINSON . . ROCKVILLE, CONN.

II. H. CHAMBERLIN . WORCESTER, MASS.
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Boston, November 2, 1864.

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ARTICLES OF ASSOCIATION.

Whereas the manufacture of wool constitutes an important branch of national industry, largely involving the labor and capital of the country; and whereas its future growth and permanent success require greater co-operation, on the part of those engaged in it, than has heretofore existed,—

Therefore, we the subscribers, for the purpose of promoting more effectually, by all appropriate means, the advancement and prosperity of the woollen interest, agree to associate ourselves together under the name of "The National Association of Wool Manufacturers," and be governed by such rules and by-laws as the Association may from time to time adopt.

PROPOSED BY-LAWS OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

SECTION I.

Members and their Election.

1. All persons whose names are enrolled as members of the Convention of Wool Manufacturers, held at Springfield the fifth day of October last, together with all others interested in the manufacture of wool, may become members prior to the adoption of these By-laws, by subscribing the Articles of Association.

- 2. From and after the adoption of these By-laws, members shall be elected only at meetings of the Government; and no person shall be eligible to membership, who is not proposed for election by some actual member, by written notice to the President or Secretary; and no person shall be admitted, if five or more negatives are given against him.
- 3. The Government, at any duly organized meeting, may elect corresponding and honorary members by the unanimous vote of the members present.
- 4. Each person admitted as a member of the Association, except corresponding and honorary members, shall pay to the Secretary the sum of dollars as an admission-fee.
- 5. Every member shall pay in advance an annual assessment of dollars to the Secretary, in addition to the admission-fee; and, upon the refusal or failure by any member to pay such assessments, his name shall be presented to the Government; and, upon their vote, be struck from the list of members.
- 6. Any member who shall have paid his assessments in full may withdraw his membership, by giving written notice thereof to the Secretary.

SECTION II.

Officers and their Election.

1. The officers of the Association shall consist of a President, three Vice-Presidents, a Secretary, a Treasurer, fifty Directors, and the members of the Standing Committees hereinafter designated, who together shall consti-

tute the Government of the Association; and nine of whom shall constitute a quorum for the transaction of business.

- 2. The Government shall have power to hold meetings at such times and places as they may think proper; to appoint Committees on particular subjects, from the members of the Government, or from other members of the Association, with full powers to act on such Committees as though members of the Government; to appropriate the funds of the Association; to print and circulate documents, and publish articles in the newspapers; to carry on correspondence, and otherwise communicate with other associations interested in the growth or manufacture of wool; to employ agents, and to devise and carry into execution such other measures as they may deem proper and expedient to promote the objects of the Association.
- 3. After the first choice, all the officers of the Association, except the Secretary, shall be annually elected by ballot, on the
- at such place as the Government may appoint, a majority of the members present being necessary to constitute an election; and they shall continue in office for the term of one year, or until their successors are elected, and qualified to take their places. No person shall be eligible for the office of President, or Vice-President for more than three years in succession; and five of the Directors, and one member of each of the Standing Committees, shall retire each year, in the order of every tenth one of the former, and the last one of the latter, as their names shall stand on the balloting list.
- 4. The Government of the Association shall choose the Secretary, and fix his salary; and may fill any vacancies occurring in their own body, after the annual election, by death, declination to serve, resignation, or any other cause, at any regular or special meeting at which a quorum shall be present.

SECTION III.

Meetings of the Association.

- 1. There shall be an annual meeting of the Association, for the choice of officers, and the transaction of other business, on the
- at such place as the Government may appoint; and notice of such meeting, signed by the Secretary, shall be mailed to the address of each member, at least seven days before the time fixed for the meeting.
- 2. Special meetings may be called by the Government, or upon the written application of twenty members not in the Government, to the Secretary; notice thereof to be given in the same manner as for the annual meetings. It shall require twenty members present at any meeting, to form a quorum; and, in case of there not being a quorum, the meeting may be adjourned by the presiding officer.

SECTION IV.

Duties of Officers.

- 1. It shall be the duty of the President, or, in his absence, of one of the Vice-Presidents, in the order of seniority, to preside at all meetings of the Association and of the Government; and the President, or one of the Vice-Presidents, shall audit and sign the annual accounts of the Treasurer.
- 2. The Treasurer shall keep an account of all moneys received and expended for the use of the Association, and shall make disbursements only upon vouchers approved in writing by the Secretary, and any member of the Committee on finance. When his term of office expires, he shall deliver over to his successor all books, moneys, and other

property; or, in the absence of the Treasurer elect, the same shall be delivered to the President.

3. It shall be the duty of the Secretary to give notice of, and attend, all meetings of the Association, and of the Government, and to keep a record of their doings; to conduct all correspondence, and carry into execution all orders, votes, and resolves, not otherwise committed; to keep a list of the members of the Association, collect the assessments, and pay them over to the Treasurer; to notify officers and members of the Association of their election; to notify members of their appointment on Committees, furnish the Chairman of each Committee with the copy of the vote under which the Committee is appointed, and, at his request, give notice of the meetings of the Committee; to give notice of and attend meetings, and keep records of the doings of the several Standing Committees upon the request of their respective Chairmen; to prepare, under the direction of the Government, an Annual Report of the transactions and condition of the Association; and, generally, to devote his best efforts to forwarding the business, and advancing the interests, of the Association.

SECTION V.

Standing Committees.

1. There shall be four standing Committees, viz.: —

A Committee on FINANCE,

- " " STATISTICS,
- " " " MACHINERY,
- " " RAW MATERIALS;

each to consist of five members, and act under the direction of the Government.

2. The Committee on finance shall have the general superintendence of all matters of finance connected with

the Association; and one or other of the members thereof shall give his written approval to all vouchers of expenditure, in order to their payment by the Treasurer.

- 3. The Committee on statistics shall inquire after and collect statistical information relating to the manufacture of wool, especially such as will tend to show the progress of its various branches, both at home and abroad, and report the same to the Government of the Association.
- 4. The Committee on machinery shall investigate new inventions and improvements relating to the manufacture of wool in any of its departments, which may from time to time be made public, and report thereon to the Government.
- 5. The Committee on raw materials shall take into consideration the origin and extent of the various raw materials used by the wool manufacturers of the United States, especially the supply and consumption of wool, the amount and character of the home growth, and the means best calculated to increase and diversify it, and report the results of their investigations to the government.

SECTION VI.

Amendment and Repeal.

1. These By-laws may be amended or repealed by a vote of two-thirds of the members present at any duly organized meeting of the Association, provided notice of such proposed change shall have been presented, in writing, at a previous meeting.

With the desports

ADDRESS de (paux)

REFORE THE

National Association of Wool Manufacturers,

THE FIRST ANNUAL MEETING IN PHILADELPHIA.

SEPT. 6, 1865.

By JOHN L. HAYES,

SECRETARY, .

WITH SECRETARYS REPORT AND TABLES.

CAMBRIDGE:

PRESS OF JOHN WILSON AND SONS.

- 1865.



ADDRESS

BEFORE THE

National Association of Wool Manufacturers,

AT

THE FIRST ANNUAL MEETING IN PHILADELPHIA,

SEPT. 6, 1865.

By JOHN L. HAYES,

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WITH SECRETARY'S REPORT AND TABLES.

CAMBRIDGE:
PRESS OF JOHN WILSON AND SONS.
1865.



ADDRESS.

THE occasion of the first annual meeting of the "National Association of Wool Manufacturers" would seem to demand from your Secretary something more than a meagre statement of transactions of the Association necessarily limited by the brief period since its organization, and has suggested, as the most suitable subject for an address which shall have a wider scope than a mere official report, the consideration of the national importance of the wool manufacture and the means of developing it.

The principal articles of the wealth of a nation are the yearly products of those industries which supply food and clothing, and the instruments by which they are produced and diffused. The distribution of these products constitutes the commerce of the world. Of the four branches of textile industry which clothe mankind, the one to which we are devoted is the most ancient, the most important to the inhabitants of the temperate regions, and, therefore, to the most civilized portions of mankind, and at present the second in commercial importance. We cannot fail to benefit ourselves by impressing upon our own minds even familiar facts and considerations which tend to exalt our industry, and stimulate us to advance and ennoble it; and it is the highest duty to our cause to enlighten the public mind as to the influence which this industry has had and may have in its future possible development, in promoting the wealth of the country and

comfort of the people, in identifying the interests of distant States, in sustaining the public credit, and securing a real national independence.

Among the well-ordered adaptations of nature for the wellbeing of the human race, one of the most beneficent is that which has supplied the temperate regions with an animal fitted to produce at the same time food and the most essential clothing of its inhabitants, and one whose culture is a most valuable accessory to general agriculture. So early did man avail himself of this gift, that we find sheep mentioned in the most ancient writings, in the first chapters of Genesis, in the Persian Zend Avesta, in the Indian Vedas, and in the Chinese Chou-king, and represented on the monuments of Egypt. According to Geoffroy Saint-Hilaire, the highest authority on the origin of species, the specific source of our domestic sheep is unknown. All that is certain is, that the present races originated in the East; the primitive names, Bock and Bouc, found in the most ancient Asiatic languages, being preserved in our term Buck.*

This species is endowed with a plasticity, so to speak, so remarkable, that it is more susceptible of modification than any other animal, except the dog,† so that "the breeder," as Lord Somerville says, "may chalk out upon a wall a form perfect in itself, and then give it existence." ‡ Hence peculiarities are developed in the coverings of different races produced by man, which make that distinctness and variety of fabric which characterize the wool manufacture; and thus we have the coarse Cordova and Donskoi wools for our carpets; the noble electoral wools of Saxony and Silesia for our broadcloths; the strong middle wools of the Southdown and our

^{*} Bulletin de la Société Imperiale Zoologique d'Acclimatation, t. 6, p. 502.

[†] Cuvier. Animal Kingdom, translated by H. McMurtrie. New York, 1831. Vol. i. p. 199.

[‡] Bischoff on Wool, Woollens, and Sheep. London, 1842. p. 380.

native sheep for blankets; the soft, long, and finer merino wools of France, Vermont, and Michigan, for thibets, delaines, and shawls; the longer and coarser combing wools of the Cotswold and Leicester races for worsteds in their thousand applications; the very long and bright-haired lustre wools of Lincolnshire for alpaca fabrics; and, lastly, the precious silky Mauchamp wool, the recent triumph of French agronomic skill, rivalling even the Cashmere, for shawls, and the Angora, for Utrecht velvets.*

The fibre of wool, rendered more perfect than any other by the more complete chemical elaborations and assimilations of the animal economy, has the most highly developed organic While the specific gravity of cotton is 1.47, of linen 1.50, and of silk 1.30, the specific gravity of wool is but 1.26.† It is, therefore, of all fibrous substances the best nonconductor, and its tissues the lightest and warmest and most healthful. The perfection of the fibre is shown in its indestructibleness and durability. Cotton and flax may be ultimately reduced to mere woody fibre. Wool is almost incapable of mechanical destruction. The existence of "shoddy," the term of reproach to the woollen manufacturers, is the strongest proof of the excellence and indestructibility of its original fibre. Unlike silk, the product of an inferior animal organization, which is straight and entirely structureless, the fibre of wool is crisped or spirally curled, and is made up of cells of different kinds, - the interior forming the pith, and the exterior consisting of serrated rings imbricated over each other, having under the microscope the appearance of a series of thimbles with uneven edges inserted into each other; these serratures, as well as the spiral curls, being more or less distinct according to the fineness of the fibre. 1 We have here the

[•] See note on p. 55.

[†] Ure's Philosophy of Manufactures, p. 81, et seq.

[†] Youatt on Sheep, p. 94. Argument by George Harding in Supreme Court of United States. Burr cs. Duryee et als. "Hat Body Case," p. 113. Report of Flax and Hemp Commission, p. 68.

cause of the invaluable quality of felting, to which we owe our hats and broadcloths. Flax and cotton composed of mere woody fibre are opaque and dull in aspect; woolly fibre, when freed from the peculiar soapy oil or yolk which nourishes and protects its growth, has a natural polish which protects it from soiling, and in some varieties gives a positively lustrous beauty to its fabrics; the vegetable fibres receive with difficulty permanent dyes, and sometimes curiously exhibit their refractory nature in contrast with wool. The fibres, accidentally detached from cotton or hempen strings, with which fleeces are sometimes bound, when incorporated with the woollen fabric, refuse the dye, and often ruin whole products of the loom. On the other hand, all animal fibres have ready affinities with the chemical agents of the dyer. Wool especially, from its beautiful whiteness, itself the result of the amelioration of the original black sheep, is unrivalled in its facility for receiving, and power of permanently retaining, color, as in the famous woollen Gobelin tapestries,* where over a thousand distinctly defined tones and hues are given to fabrics destined to be indestructible as works of art.

Such are the qualities of fibre which have led every industrious nation to the culture of flocks as the first necessity of its people; which have caused, in every manufacturing nation, the demand to constantly exceed the supply; which have transplanted colonies from the Cape of Good Hope to Australia, and have carried the shepherd-emigrant to the steppes of Russia and the plains of La Plata; † and which have brought the present production to such enormous figures as are given by recent German estimates, ‡ giving to Great Britain an annual production of 260,000,000 pounds of wool; to Germany,

Chevreiul on Colors. Translated from the French by John Spanton. London, 1858. p. 113.

[†] See Southey on Colonial Wools, passim.

[‡] United-States Economist of June 10, 1865, which quotes from a writer in the Year-book of German Cattle Breeders.

200,000,000; France, 123,000,000; Spain, Italy, and Portugal, 119,000,000; European Russia, 125,000,000; making, in all Europe, 827,000,000; in Australia, South America, and South Africa, 157,000,000; the United States, 95,000,000; the British North-American Provinces, 12,000,000; Asia, at a very general estimate, 470,000,000; Northern Africa, 49,000,000: the aggregate production of wool in the whole globe amounting, by these estimates, to 1,610,000,000, or a pound and a quarter to each inhabitant, reckoned at twelve hundred and eighty-five million people.

In tracing the history of the woollen manufacture, we find that it had already attained considerable perfection with the Romans, who employed this material in almost all their garments,† and with whom sheep were so abundant that a single patrician bequeathed, by will, two hundred thousand to Augustus.‡ The prices of the finer fabrics, however, were enormous.

[•] Bulletin of American Geographical Society, 1865, p. 153. Hon. Fred. A. Conkling, in a paper on the Production and Consumption of Cotton, furnishes a table, prepared by Prof. A. J. Schem, in which the populations of all the countries on the globe using cotton exclusively are set down at 695,596,483. The populations which use cotton only partially (and, consequently, use more or less wool) are set down at 519,656,253.

^{† &}quot;All the garments of both sexes were for many centuries made of wool exclusively; and, although silk and flax were introduced under the empire, they were never adopted by any large portion of the community." — Ramsay's Elementary Manual of Roman Antiquities. London, 1860. p. 238.

[‡] Statistique des Peuples de Antiquité, par M. Moreau de Jonnes, t. ii. p. 464. The invaluable race of merino sheep is probably an inheritance of Roman civilization. The race most prized by the Romans was called the Tarrentine, from Tarrentum, a town settled by a Greek colony. They were also called Greek sheep. Their wool was of exceeding fineness; and they were protected by coverings of skins, and were also carefully housed, and often combed, and bathed with oil and wine. Hence they were very delicate. Columella, the most eminent agricultural writer of the Romans, who lived in the century before the Christian era, relates (De Re Rustica, lib. vii. chap. 2) that his paternal uncle, M. Columella, "a man of keen genius and an illustrious agriculturalist," transported from Cadiz to his farm-lands, which were in Boetica, comprehending a part of the present province of Estramadura, some wild rams of admirable whiteness brought from Africa, and crossed them with the covered or Tarrentine ewes. Their offspring, which had the paternal whiteness, being put to Tarrentine ewes, produced rams with a finer fleece. The progeny of these again retained the softness of the dam and the whiteness of the sire and grandsire (maternam mollitiem, paternum et avitum colorem). Other agriculturalists undoubtedly imitated Columella, and a stronger constitution was thus imparted

The Roman purple worn by the senators was made from wools of Italy, which, according to Pliny, were worth four dollars per pound of twelve ounces, and which, of the same weight, were worth one hundred and sixty dollars, when colored with the Tyrian dye.† It is not strange, then, that Horace should boast of a gift to his mistress of fleeces twice dyed with the Tyrian murex.‡ The world has regretted, for many centuries, the loss of this imperial dye; but within the last ten years, or no later than 1856, chemistry has produced from aniline, a product of worthless coal tar, a purple tint, resisting light, alkalis, and acids, § and rivalling, upon the light worsted zephyrs of our simple maidens, the hue of the patrician mantle.

The woollen industry disappeared with the incursions of the barbarians and the fall of the Roman Empire, or languished

to the fine-fleeced but delicate sheep of ancient Italy. That this improvement was commenced in ancient Spain is further established by the testimony of Strabo, who says, in his account of the geography of that country (lib. iii. chap. 2), that in his time, that of the Emperor Tiberius, wool of great fineness and beauty was exported from Truditania, a part of Bœtica; and that rams were sold in that province for improving the breed for a talent each, or about one thousand dollars. When the Roman Empire was overrun by the barbarians, the Tarrentine stock of Italy, being very tender, became extinct; but the improved stock of Bœtica, living in the mountains, survived and perpetuated by the Moors, who, skilled in the textile arts, could appreciate its value, still exists as the merinos of Spain. If this view is correct, the merino race is the most important surviving relic of the material civilization of the Greeks and Romans. I shall be excused for these remarks, which may be of little practical benefit, by those who appreciate the sentiment of Niebuhr, the great historian of Rome, "that he who calls what has vanished back into being, enjoys a bliss like that of creating."

^{*} Pliny's Natural History (lib. viii. chap. 73): Centennos nummos, or a hundred sesterces, a sesterce of the value of four cents. — Allen's Classical Hand-book, p. 110.

[†] Pliny's Natural History (lib. ix. chap. 63): Denarits mille, or a thousand denarit, a denarius of the value of sixteen cents.—Allen's Classical Hand-book, p. 110.

[†] Muricibus Tyriis iteratæ vellera lanæ, epod, 12-21.

^{§ &}quot;It is no exaggeration to say that the introduction of this one color (the aniline purple) has been a greater boon to the dyer than all the other inventions of the last ten years put together. Not only is the hue yielded by the coal tar (purple) of a different and better kind than any before known: it is likewise so fast, that it may, with indigo blue and a few other colors, be considered as permanent."— International Exhibition of 1862. Reports of Juries, Class 21.

only in domestic manufacture, or in the abbeys where the monks of the dark ages still pursued the arts necessary for their own comfort. This decline in the arts continued until the time of the Crusades, which effected a complete revolution in industry and commerce. The Crusaders* found in Asia the scattered fragments of the sciences and arts, and among others, the processes for making those rich fabrics which had formed the most luxurious vestments and furniture of the Romans.† The States of Italy were the first which availed themselves of these discoveries, making the mechanical arts auxiliary to the commerce which they had revived on the ancient course of navigation to the East. In the twelfth and thirteenth centuries, Florence, Venice, Pisa, and Genoa, had arrived at great perfection in manufactures. In those States we have the first brilliant illustration of the influence of the industrial arts upon the prosperity of the State. Florence owed her splendor to the woollen manufacture with which she supplied the world. \(\pm\) Machiavelli alludes to the sound of the moving shuttle which resounded in all her streets, and he mournfully contrasts the former cheerful hum of a busy industry with the stillness prevailing, after the loss of this manufacture, through the plague and change of traffic. It is no little boast for our industry that it was the source of the commerce and wealth whose magnificent fruits still survive in the wonders of Florentine art.

[•] Mill's History of the Crusades, vol. ii. p. 846.

[†] Metellus Scipio, in the accusation which he brought against Cato, stated that even in his time Babylonian (Asiatic) coverings for conches were selling for 800,000 sesterces, or \$128,000. In the time of Nero, they had risen to four million sesterces, \$640,000. — Pliny's Natural History, lib. viii. chap. 73.

Some of the most ancient Asiatic forms survive unchanged in modern woollen fabrics, such as the palm patterns of shawls. Specimens of Cashinere shawls, of the kind called *Espoulisé* in France, collected, in the year 835, by Theodolphus, Bishop of Orleans, are preserved in the archives of the Bishopric du Puy de Velay.—Pastoral Life and Manufactures of the Ancients. New York, 1845. p. 94.

[†] Millar's Historical Views of the English Government, vol. ii. p. 370. James's History of the Worsted Manufacture, p. 20.

Quarterly Review, January, 1821, p. 296.

The Netherlands, already advanced, as early as the tenth century, in the manufacture of linen, which their soil produced of admirable quality, readily appropriated from the Italians the arts of manufacturing wool. Favored by their internal water-carriage, which gave them supplies of material, and by the middle station of their ports in the foreign navigation of the maritime nations, they had outlets for their commodities in all parts of Europe. They supplied themselves with wool from England, to the vast amount of forty-five million pounds in some years, and were aided, at one period, in obtaining wool from Spain by the union of the sovereignties of Spain and the Netherlands under Charles V. Flanders continued for a long period to supply Europe with all the woollen cloths and stuffs demanded by luxury or taste, and was the veritable centre from which the arts of fabricating woollens spread in time to all the other industrious nations of Christendom.* Flemish wealth, derived mainly from this industry, was the envy of all Europe. Letters and the fine arts were encouraged and flourished, and the works of the Flemish, no less than the Florentine painters, survive to illustrate the great truth that the true source of the highest culture of a nation, and of its only immortal monuments, is its industrial prosperity.

This sketch of the industry of Rome, Italy, and Flanders, is but introductory to that of the great nation from which we derive our language, institutions, and arts, and which, commanding a foreign trade of not less than twenty-one hundred millions of dollars, and exporting annually her manufactures to the amount of six hundred and fifty millions of dollars,† must be first looked to for instruction and example by all nations who seek their own industrial development. We find that our own industry has played no mean part in securing England's commercial prosperity.

^{*} Hume's History of England, vol. ii. p. 398. Motley's Rise and Fall of the Dutch Republic, p. 36. Millar, supr. cit.

[†] The Tariff Question, by Erastus B. Bigelow, p. 8.

The climate of England is wonderfully fitted for raising certain breeds of sheep, and it is probable that our British ancestors were employed in the domestic production of woollen goods from the earliest period that they had emerged into civi-Names derived from textile occupations must have been early incorporated among English sirnames. The name rendered so familiar by its quaint calligraphy upon our Treasury notes, and that of New-England's great orator, are inherited from the ancient spinners and websters, or weavers of England. Nevertheless, the English produced only common stuffs, and exported, in the eleventh century, more than half their wools to the Netherlands. In the early part of the fourteenth century, the English are spoken of as "only shepherds and wool merchants," and as "depending on the Netherlands, who were the only wool-weavers in Europe.* In the latter part of the fourteenth century, the manufacture of wool received its first impulse in England, and became firmly transplanted upon her soil by the protecting influence of Edward III., who thus added to his title of hero of Cressy, the prouder name of father of English commerce. The eyes of this enlightened sovereign were opened to one of those simple facts which England now expects to be invisible to all other nations. in the quaint words of the author of the "Golden Fleece," -" that the subjects of the Duke of Burgundy, receiving the English wool at sixpence a pound, returned it, through the manufacture of that industrious people, in cloths at ten shillings, to the great enriching of that State, both in revenue to their sovereign and employment to their subjects. He at once proposed how to enrich his people, and to people his new conquered dominions; and both these he designed to effect by means of his English commodity, wool." † The first great step

[•] The Pensionary De Witt, quoted by Youatt. Sheep, their Breeds, &c., by William Youatt, p. 205.

[†] Smith's Memoirs of Wool, vol. i. p. 189. Youatt, p. 205.

of Edward was to attract to England a large number of Flemish families initiated in the arts of fabricating woollen goods; and it is said that "he not only royally performed his promises to them, but he likewise invested them with privileges and immunities beyond those of his native subjects." families were brought over in the first year. England became speedily enriched by "this treasury of foreigners," as Fuller styles them in his Church History. "Happy," says he,* "the yeoman's house into which one of these Dutchmen did enter, bringing industry and wealth along with him. Such who came in as strangers within doors, soon after went out bridegrooms and returned sons-in-laws, having married the daughters of their landlords who first entertained them; yea, those yeomen in whose houses they harbored, soon proceeded gentlemen, gaining them estates to themselves, arms and worship to their estates." During his great military preparations, Edward summoned a parliament, whose principal business it was to make laws for the encouragement of the woollen manufacture in England.† The exportation of rams was prohibited, and it was decreed that no foreign cloth manufactures should be received, and that no one even should wear cloth made beyond the sea. Through these measures the manufacture became so well established that the first export of English cloth dates from this reign. A tax upon importations was substituted for the prohibition, and in the twenty-eighth year of this reign the exports of cloths were triple the imports."

^{*} Fuller's Church History. London, 1842. Vol. i. p. 419.

[†] Bischoff on Wool, &c., vol. i. p. 55.

[†] In the sixth and seventh years of Elizabeth, the woollen manufacture had so much increased that the export of woollen goods to Antwerp alone, according to Camden, amounted to 750,000*l.*; and the whole value of the exports in 1564 was 1,200,000*l.* (Smith, vol. i. p. 72), all fabricated of English wool. The vigor of the woollen trade at this period is attributed by Smith to the abundance of gold and silver, in consequence of the recent discovery of South America. Mr. Bigelow has shown that the chief causes of the large increase of British exports since 1853, usually attributed to the free-trade acts, are found outside of the tariff laws, and principally in the greatly increased

For five centuries the system of protection to the woolmanufacturers, inaugurated by Edward III., was continued by the succeeding sovereigns and parliaments of England. The abstract of laws relating to the growers of wool and the manufacture thereof, made in 1772, enumerates three hundred and eleven laws,* all tending to one object, - the encouragement of the manufacture. With this object the exportation of wool, after being several times suspended, was definitely prohibited in 1660, and so continued until the year 1825.† The exportation of fuller's earth was forbidden. The exportation of sheep was prohibited under the severest penalties; 1 and even sheep-shearing could not be carried on within five miles of the sea without the presence of a revenue officer. To secure the manufacturers against a monopoly of wool, the number of sheep to be kept by one person was limited to two One statute required that all black cloth and thousand. mourning stuff worn at funerals should be made of British wool alone; another, which was carried into full effect for one hundred and thirty years, or nearly to the present century, ordained that every person should be buried in a shroud composed of woollen cloth alone. The export of woollen cloth from England to any foreign ports was permitted without a duty.** The export of woollen goods from Ireland, or any of the English Plantations in America, was prohibited. †† Upon the application of the London and Canterbury woollen weavers, the wearing of



supply of gold, the annual produce of which has tripled since 1848. The correspondence between the periods of Elizabeth and Victoria is quite remarkable. - The Tariff

Bischoff, vol. i. p. 6. See Bigelow's Tariff Question, p. 17.

[†] Porter's Progress of the Nation. London, 1851. p. 168.

[†] Youatt, p. 216.

[§] Bischoff, vol. i. p. 244.

[|] Youatt, p. 216.

[¶] Youatt, p. 224.

^{••} First William and Mary. Bischoff, vol. i. p. 85.

^{††} Tenth and Eleveuth William III., chap. 10. Bischoff, vol. i. p. 89.

Indian calicoes was forbidden, and afterwards,* when it was apprehended that the rising cotton manufacture might interfere with the great national industry of woollens, the use of British printed calicoes was restricted to those only of a blue color.† Even the great commercial companies of England lent their protecting influence. The powerful East-India Company, possessing the power to open an almost boundless market for woollen goods, made it an invariable rule that in the cloth which it exported, both the material and manufacture should be British. This rule was inflexible till 1828.‡ The arts of diplomacy were not wanting on the part of England in aid of her favorite interest. At the close of the seventeenth century, Portugal, by interdicting the entry of foreign fabrics, had succeeded in supplying her own population and Brazil with woollen goods of her own manufacture. In 1703, England, having in view principally the interests of the woollen manufacture, made the famous Treaty of Methuen, by which, in consideration of certain favors to Portuguese wines, she secured the free admission to Portugal of her woollen goods. The English historian might well say, "this treaty hath proved very advantageous to England, in the woollen trade particularly." ¶ But this treaty was a mortal blow to Portugal. Her manufacturing industry disappeared. While all Europe progresses, Portugal remains stationary. The few of her products shown at the great Exhibition in 1862, were noticed only for the melancholy representation which they gave of her industry.

The measures of protection which were most significant of

^{*} Bischoff, vol. i. p. 90.

[†] Bischoff, vol. i. p. 97.

[†] Report of Committee of House of Lords, 1828. Examination of Mr. Ireland.

[§] Smith's Memoirs, vol. i. p. 394. "I appeal to every person," says Smith, "that lived in Portugal from the year 1683 to 1703, during the time of the prohibition, whether Portugal did not make cloth enough for herself and Brazil."

^{||} Smith, vol. i. p. 894.

[¶] See Smollett's History of England, vol. i. p. 568.

the devotion of England to her manufacturing interests, were the prohibition, for nearly a century and a half, of the exportation of British wool,* and the admission of foreign wool at a merely nominal, or very moderate duty, in spite of the violent reclamations of the landed aristocracy. In a struggle of over a hundred years with the manufacturers, the landed proprietors had but one brief success, where they secured, for four years only—viz., from 1819 to 1824—a tax upon foreign wool of six pence per pound.† It had become a deep-rooted sentiment of British statesmen of every party, that their highest duty to the State was the encouragement of their own manufactures, and, first of all, those of wool, for so many years their chief export, and peculiarly national staple, - " eminently the foundation," as it was called, "of English riches," 1 and "the flower and strength, the revenue and blood of England." § The "wool sack," upon which the Lord Chancellor of England has sat for ages as the President of the House of Lords, is a symbolical tradition of the importance which the nation has always attached to the woollen industry. | It was declared by statute that "wool and woollen manufactures, cloth, serge, baize, kerseys, and other stuffs, made or mixed with wool, are the greatest and

[&]quot;The one sole reason why England obtained the mastery of the ocean, and command of the world's business, is that she exported no raw material; and the reason why the Southern States went into ruin by the route of rebellion is because they exported nothing else."—The Western States; their Pursuits and Policy, by Dr. William Elder, p. 20.

[†] In 1802, a duty of 5s. 8d. sterling per cwt. was laid upon foreign wool. This was gradually raised till it reached 6s. 8d. per cwt. In 1819, the ministers wanted to raise 1,400L by a tax on malt; and the landed aristocracy refused their assent unless a tax was laid on wool, and the tax of sixpence a pound was imposed, the bill having been hurried through Parliament before the manufacturers could be heard. Bischoff, vol. i. p. 452.

t Sir Josiah Childs. Smith's Memoirs, vol. i. p. 157.

[§] Golden Fleece. 1656. Smith's Memoirs, vol. i. p. 139.

[&]quot;The antiquitie of wool within this kingdom hath been beyond the memorie of man, so highly respected for those many Benefits therein that a customable use has always been observed to make it the seat of our wise learned judges in the sight of our noble Peers (in the Parliament House) to imprint the memorie of this worthy Commoditie within the minds of those firm supporters and chief rulers of the land."—John May, 1618. Smith's Memoirs, vol. i. p. 91.

most profitable commodities of the kingdom."* One of the greatest English lawyers, Mr. Lawes, afterwards Lord Ellenborough, speaking of this interest before the House of Lords, said,† "to state to your Lordships the extent of the manufacture, would be to state that it is at least a third in point of export, that it is a fourth of the national income, as derived from all its various sources. Its magnitude is so important, its connections with the vital interests of the country so close and intimate, that it has been the principal object of attention in the framing of the statutes upon your rolls from the earliest period of any ascertained act of legislation of this country." The encouragement of this industry had received the sanction of the greatest of English names, even that of the founder of experimental philosophy. Lord Bacon, addressing the future ministers of his sovereign, patriotically exclaims, ‡ "Let us advance the native commodities of our own kingdom, and employ our own countrymen before strangers. Let us turn the wools of the land into cloths and stuffs of our own growth. It would set many thousands to work; and thereby one of the materials would, by industry, be multiplied to five, ten, and many times to twenty-five times more in value, being wrought." It was by such lessons and traditions as these that British legislators had become imbued with devotion to the woollen trade, as with loyalty to the throne. In the whole history of the world there is no such example of persistent national care, continued alike through all administrations, in peace and in war, under commonwealth and monarchy; and thus "fondled, favored, and cherished," to use the words of Mr. Huskisson, & the woollen manufacture in England has advanced, with constantly increasing prosperity, only, in mod-

^{*} Tenth and Eleventh William III., chap. 10.

[†] Bischoff, vol. i. p. 828.

[†] Bischoff, vol. 7. p. 321. From Mr. Lawes' speech. I do not find the passage in Lord Bacon's Works.

[§] Bischoff, vol. i. p. 5.

ern times, overshadowed by its own offspring, the cotton manufacture, and still surpasses that of all other nations in the quantity and value of its fabrics.

"The rapid growth and prodigious magnitude of the cotton manufacture of Great Britain," for a century has not elapsed since its infancy, have been called "the most remarkable phenomena in the history of industry." But it should be remembered that this industry was the natural offshoot from the woollen manufacture. Through the protection of four centuries afforded to the woollen trade mainly, and in a less degree, only because they were less important, to the linen and silk trades, England had become a nation of spinners and weavers, or of artisans subsidiary to them. The textile crafts had become, by hereditary transmission, as fixed as in the castes of India. The skill and taste for textile industry was already developed for application to a kindred fibre. Some of the first and most important inventions which have produced the wonderful results of the cotton manufacture, sprang directly from that of woollens. To instance one only; John Kay, residing in Colchester, where the woollen manufacture was then carried on, devised the fly-shuttle, by which double the quantity of cloth, and of a better quality, could be produced by each workman, and with less labor. The Yorkshire clothiers were the first to adopt his improvements, which form a part of every power-loom of the millions of silk, cotton, linen, and woollenlooms in all parts of the world.† The commerce and capital which supplied the raw material from abroad for the rising manufacture had grown up from the woollen trade principally; but it had exerted a more important influence in making capitalists familiar with the direct and incidental profits of manu facturing industry, and in assuring them that the favor of government, which had been extended for centuries to one,

McCulloch's Commercial Dictionary, article Cotton.

[†] Brief Biographies of Inventors of Machines, by Bennett Woodcroft, p. 8.

would never be wanting for a kindred interest. Hence capital flowed by a natural transition into the new channel, and invention found a fresh field for its creative skill under the patent system which England had inaugurated as a part of her protective policy. The subject which I have proposed for this address,—the national influence of our own peculiar manufacture,—finds its most brilliant example in the history of English industry, which no less illustrates the more important truth, that any industry, thoroughly incorporated in the national existence, will have new offshoots and unexpected developments, and may enrich a nation even more than by its own fruits, in opening fresh sources of productive power.

Towards the close of the last century the woollen manufacture received in its turn the inventions first applied to cottonspinning. They were, first of all, the great discovery of Watt, which furnished a motive-power everywhere applicable; the roller-spinning of Paul, adopted by Arkwright, which furnished an automatic mechanism, instead of muscular force, which drew and twisted the fibre in a continuous thread; the jenny of Hargreaves, which drew at once from ten to sixty or seventy threads; the mule of Crompton, which increased the power of the spinner a hundred fold; and the power-loom of Cartwright, which quadrupled the power of the weaver.* All these inventions, and what was equally important, the factory system of Arkwright, were applied, upon a large scale, to the woollen manufacture, first by Mr. Gott, who added the gig-mill for raising the wool on the cloth, and shearing-frames worked also by power. These improvements gave a vast extension to the manufacture. The use of woollen tissues increased with the low price of production, which continued to advance with accelerated progress. At the end of the eighteenth century Great Britain already consumed in her fabrics ninety-four millions of pounds of her own wool, and eight millions imported.

[·] Woodcroft, p. 8, et seq.

In 1828, the number of sheep in Great Britain had increased one-fifth, and the average weight of the fleeces in equal proportion. Mr. Bernoville, in his admirable work on the "Industry of Combed Wools," published in the report made to the French government on the labors of the French Commission, at the Universal Exposition of 1851, estimates the number of pounds of wool in Great Britain in 1851 at two hundred and eight million pounds, so that the production doubled in fifty years. This increase of production was caused partly by the increase of the number of sheep, but principally by the increase in the weight of fleeces. Within that period a genuine transformation has taken place in the English races. To attain the utmost possible weight of mutton, sheep are fed to their utmost capacity, and the increase of flesh is accompanied by a corresponding increase of wool, which, losing in fineness, has gained in strength, length, and brilliancy. While the domestic production has made such extraordinary progress, the importation has increased with equal rapidity. The eight million pounds in 1801 have risen successively from sixteen million pounds in 1821 to fifty-six millions in 1841, to eightythree millions in 1851, having increased tenfold in fifty years. In 1859, the importation had reached one hundred and thirtythree millions.†

There are no official statements of the amount or value of the whole production of British manufactures, or of the population employed in them; we must, therefore, rely upon the very general estimates of the best authorities, which, however, differ so widely that we can merely approximate the totals of production in the woollen manufacture. Mr. Bernoville, in the work above quoted, estimating the mean value of the domestic production of wool in Great Britain at one franc twenty cen-

† Bigelow's Tariff Question, Appendix, p. 198.

[•] Porter's Progress of the Nation. London, 1851. p. 168. Industrie des Laines peignées, par M. Bernoville, p. 11. Travaux de la Commission Française, vol. iv.

times the pound, and the imported wool at one franc seventy centimes, places the whole value of wool employed by British industry at 370,000,000 francs, or \$74,000,000. He estimates that the value of this wool is increased once and a half times by the manufacture, and that the annual production of woollen fabrics in 1851 was 925,000,000 francs, or \$185,000,000, and the domestic consumption 679,000,000 francs, or \$135,000,000. Mr. Redgrave, one of her Majesty's Inspectors of Factories, estimates the value of the British woollen and worsted manufactures in 1856 at \$183,492,725, and the domestic consumption in Great Britain, \$111,366,160, for each person of its population at \$4.25.* Mr. Simmonds, the editor of Ure's "History of the Cotton Manufacture," estimates the total production of woollen goods in 1860 at \$160,000,000, and the domestic consumption at one-half that amount. This estimate appears too small, and that of Mr. Redgrave seems most reliable. Judging from the progress of exports, sixty millions of dollars in 1856, and eighty millions in 1860, the value of the woollen manufactures in the United Kingdom cannot be short of \$200,000,000. The number of persons employed in the woollen industry, in all its ramifications, was estimated in 1841 at 245,000 persons. This number must have vastly increased in twenty years. Mr. Bernoville estimates them at 400,000 in 1851. Statistics have been procured, from time to time, by the inspectors of factories in reference to establishments under their supervision. They give the number employed in the wool manufacture in 1856, at 79,091; and in the worsted manufacture at 87,794; a total of 166,885. The number employed in 1835 is stated at only 71,274. The number had more than doubled in twenty years, although the progressive employment of mechanical means has had a tendency to diminish the number of hands. Precise data are given only in

^{*} Bigelow's Tariff Question. Appendix, p. 199.

relation to establishments subject to the provisions of the Factory Acts, which make the whole number employed in all the textile manufactures only 682,497. Mr. Redgrave estimates that there are 887,369 persons employed in textile fabrics, not subject to the provisions of the Factory Acts, which two classes have dependent upon them at least 3,000,000 unemployed persons, representing a total of 4,568,082 persons. employed in the woollen and worsted manufactures constitute very nearly a quarter of the whole number enumerated under the provisions of the Factory Acts, which would give to the woollen manufactures a population, depending upon them, of over one million. This immense progress in the manufacture of wool has been due principally to the advance in the manufacture of combing wools or worsted, which now employ directly a larger number than fabrics of carded wool. This progress is best illustrated by the rapid increase of population around the manufacturing centres of the worsted trade. In the West Riding, where there was only a population of 593,000 inhabitants in 1801, it had risen, in 1841, to 1,154,000; it had increased at Halifax from 63,000 to 130,000; at Huddersfield from 14,000 to 38,000; at Leeds from 53,000 to 152,000. It is still more remarkable at Bradford, the great centre of the worsted trade. At the commencement of this century, when this town had a population of only 13,000 souls, all the wool was spun and woven in private houses of the workmen. In 1821, Bradford had doubled the number of its inhabitants, which were 26,000. By the introduction of power-looms in 1834, and afterwards the use of cotton warps in woollen fabrics, and the employment of alpaca and Angora goat's wool, the manufacturing industry was so developed that it sustained in 1851 a population of 103,000, an increase of ninety thousand in half a century. Such an increase in this country would

^{*} Bernoville's Industrie des Laines peignées, p. 22. James's History of Worsted Manufacture, p. 611, et. seq.

appear by no means remarkable; but in England, where the question has been for centuries, how to employ the present population of each year, the increase is truly marvellous.

One of the most interesting questions in the study of the philosophy of manufactures is their influence upon the comfort of mankind in diminishing the cost of production. The amounts and values of British exports are instructive upon this question.

One of the largest exportations of woollen tissues from England occurred in the year 1815, after relations had been established with this country, which had been interrupted by the war. It amounted to £9,381,000 in value, and 1,482,000 pieces, and twelve millions of yards. In 1851, it amounted to 2,637,000 pieces, and sixty-nine million yards. The number of pieces, comprising cloths, damasks, and stuffs in general, had almost doubled; and the number of yards, consisting principally of articles of wool and cotton, had more than quintupled. Yet the total value in 1851 was only £9,856,000, exceeding the exportation of 1815 about half a million. The increase of cheapness consisted principally in fabrics of wool combined with cotton.*

This progress in the cheapness of production has continued since 1851. It is estimated in the report of the International Exhibition of 1862,† from well authenticated data, that although there was a clear and established advance of twenty-five to twenty-eight per cent in the cost of wool between the prices of 1851 and 1862, the manufacturers had cheapened the prices of goods between the two periods from seven and a half to ten per cent, the quality and weight being the same. It is, perhaps, unnecessary to say that this increased cheapness of production is no peculiarity of English manufactures. The facts here mentioned illustrate a result which is sure to follow

^{*} Bernoville, p. 18.

[†] International Exhibition of 1862. Report of Juries, Class 21.

from any well established manufacturing industry. An increased cheapness of production in England has been effected by two other causes, one of which certainly will be regarded by consumers with less favor. The first is, the use of cotton warps, which are used as a vehicle to extend the surface of wool to such a degree that millions of pounds of cotton are, as it were, plated with this material. Vast establishments in Lancashire are employed solely in making cotton warps, to be woven with wool into what are called union fabrics.* The second is, the combination of shoddy with wool. Twenty-five years ago, woollen rags were worth about £4 per ton, and were used only for manure. They are now worth, in England, £40 per ton, to be converted again into cloth. It is estimated that, in the neighborhood of Leeds, 7,000,000 to 8,000,000 yards of cloth, of the value of \$15,000,000, are annually manufactured from this material; and, that if the supply of shoddy were stopped, it would close one-third of the woollen mills in the United Kingdom, and bring distress upon the West Riding, in Yorkshire, as great as that lately suffered in Lancashire from the want of cotton. It is disclosed in the report on the London Exhibition of 1862, that sixty-five million pounds of shoddy are annually consumed in England, a greater quantity than the whole wool product in the United States, estimated at 60,264,913 pounds by the census of 1860! It is one of the advantages of depending upon foreign importation for our goods, that we are in blissful ignorance of their

[•] Mr. Anderson, a gentleman of much experience in English wool, stated before an agricultural club in England, that a single hogget fleece weighing twenty pounds, with a length of staple of about seventeen inches, "when used in manufacture to its utmost extent, as an admixture with cotton to fabricate the finest alpaca fabrics, would suffice to make upwards of twelve pieces, each forty-two yards in length, and very possibly might be extended to sixteen pieces, or six hundred and seventy-two yards."— Ohio Agricultural Report, 1863, p. 224.

I would, in this connection, invite attention to the most valuable and admirable papers and communications on sheep, husbandry and wool, furnished for these reports by Mr. Klippart, Secretary of the Ohio State Board of Agriculture.

[†] Eighth Ceusus of the United States, vol. Agriculture, p. 86.

origin, and are not shocked with the consciousness of being clad in the cast-off habiliments of a Polish Jew or an Italian beggar.

I will close this sketch by some general remarks upon the character of the British industry in woollens. The whole energies of British manufacturers are directed to supply the masses with goods of the utmost cheapness. They do not seek so much excellence in the fabrics as marketable products. was remarked by continental observers, at the two great expositions, that although fabrics of wonderful perfection were exhibited, they were not specimens of the ordinary work of their spindles and looms. The colors of their goods are excellent, much better than their designs; but, above all, they surpass in the art of dressing their fabrics so as to conceal their defects and make them attractive to purchasers. Their inventive capacity is shown, particularly in the application to new uses of the vast variety of raw materials which their extensive commerce supplies, but, more than all, in mechanical improvements for substituting the iron frame for the human hand. The breaking up of existing machinery and the replacing of new is the marked feature in the present era of British manufactures. The abundance and cheapness of capital, cheap food under the change in the corn laws, the free admission of raw materials, a well founded confidence in friendly legislation, and the establishment of mercantile houses in all parts of the world, sustain England in the war which she is waging unceasingly against the manufacturing industry of all other nations; and would render a strife against her utterly hopeless, without the barriers of countervailing duties which the instinct of selfpreservation has placed around all other industrious nations.

The history of the woollen industry of France, the second in the amount of its productions, and the first in the general excellence of its products, exhibits the important part which this industry performs in developing the national prosperity, and how it may flourish or decay under the favorable or adverse policies of governments.

This industry received its first impulse in France, near the close of the sixteenth century, from the celebrated edict of Nantes, which restored to that country the Protestants, who had become the most enlightened merchants and skilful workmen in Europe. They brought from Germany, and the Low Countries where they had wandered, the arts of spinning, weaving, and dyeing woollens, and founded the first establishments for making woollen cloths. The infant manufactures, slightly advanced by the agricultural improvements of Sully, who introduced some important breeds of sheep, and, languishing under the inauspicious administration of Richelieu, were finally planted in their present flourishing seats by Colbert, the illustrious minister of Louis XIV. Under his administration, the manufactures of new products created by the arts of Italy, Holland, and Germany, were attracted to the French soil by seductive offers made to foreign artisans. The woollen manufacture received his special attention. He obtained, from Louis XIV., the disposal of fifty thousand livres to be distributed in encouraging this industry. At this period, Holland alone had attained any perfection in the manufacture of fine cloths. Colbert attracted Gosse Van Robais from Holland, by enormous concessions, to fabricate — as his patent, signed by the King, declared - fine cloths, after the fashion of Spain and Holland. Of this act Thiers says, — "When Louis XIV. struck down the Spanish power, Colbert, at his side, executed conquests more important, by introducing the manufacture of cloths into France." * Not content with naturalizing foreign skill, he imposed heavy duties upon foreign manufactures, and attempted the amelioration of flocks by imported breeds; and it is admitted that France owes to his wise acts and counsels

[•] Industrie des Laines fouleés, par M. J. Randoing, p. 38.

the most important developments of her industry.* It is with great justice, then, that our own great political economist, whose works, translated into five languages, have been adopted as text-books in the universities of the continent of Europe, has selected the name of the French financier to designate that school of statesmanship which aims to develop, by protection and encouragement, the industrial wealth of a nation.†

The woollen interest became again depressed under Louis XV., in whose reign those arts alone flourished which administered to pleasure and luxury. The manufacture revived under Louis XVI., in whose reign merino sheep were naturalized in France, to be again struck down by a fatal error of administration. In 1786, a treaty was concluded between France and England, which admitted into the latter country French productions of luxury and taste, in exchange for an analogous concession for the admission to France of English goods of apparently small price, but which, suiting all classes, are the essential bases of the industry of a people. This treaty was the most fatal blow that the textile manufactures had ever received. England, favored as we have seen by continued protection, had already made great progress in the capacity of manufacturing at comparatively low prices. Before the lapse of the second year from this treaty, France was so flooded by English importations of cloth that she ceased to attempt even to supply her own consumption. Although the policy of 1786 was speedily retraced, and protection restored, the French manufactures had not recovered from the shock when the revolution completed the prostration of all industry.1



^{*} See the Works of Mr. H. C. Carey, passim.

[†] Smith, in his Memoirs, speaks thus instructively of this great statesman: "Monsieur Colbert, erecting manufactures of wool in all parts of France, and prohibiting all the English woollen manufactures to be imported among them, in a few years set the poor to work throughout that kingdom; . . . the first consequence of which was, that the King of France saw all his subjects clothed, however indifferently, with the manufactures of their own country, who, but a few years before, bought all their clothes from England. — Vol. ii, p. 290.

[†] Randoing, Industrie des Laines fouleés, p. 21. Manual of Social Science, by H. C. Carey, p. 209.

No sooner had the first Consul, Bonaparte, grasped, with a firm hand, the reins of State, than he resolved to develop upon the French soil all the elements of wealth concealed within its bosom. He wished to appropriate for France all sciences, arts, and industries. Made a member of the Institute, he uttered this noble sentiment: -- "The true power of the French Republic should consist, above all, in its not allowing a single new idea to exist which it does not make its own." * To learn the necessities and resources of the nation, he called upon savans, painters, and artisans, to adorn with their productions the vast hall of the ancient Louvre. From this epoch a new career was opened to the industry of France, which found its most magnificent protector in the chief of the State. Napoleon said: -"Spain has twenty-five millions of merinos; I wish France to have a hundred millions." † To effect this, among other administrative aids, he established sixty additional sheepfolds to those of Rambouillet, where agriculturalists could obtain the use of Spanish rams without expense. By the continental blockade, he closed France and the greater part of Europe against English importations; and the manufacturers of France were pushed to their utmost to supply, not only their domestic, but European consumption. They had to replace, by imitating them, the English commodities to which the people had been so long accustomed. The old routines of manufacturing were abandoned, and the reign of the Emperor became, in all the industrial arts, one long series of discoveries and progress. Napoleon saw that the conquest of the industry of England was no less important than the destruction of its fleets and armies. He appealed to patriotism, as well as science and the arts, to aid him in his strife with the modern Carthage. Visiting the establishment for printing calicoes of the celebrated Oberhampf, Napoleon said to him, as he saw the perfection of

[†] Bernoville, p. 188.



Bulletin de la Société Imperiale Zoologique d'Acclimatation, 2d Serie, t. i. p. 665.

the fabrics, — Nous faisons tous deux la guerre à l'Angleterre, mais je crois que le meilleure est encore la votre— "We are both of us carrying on a war with England; but I think that yours, after all, is the best." "These words," says M. Randoing, "so flattering and so just, were repeated from one end of France to the other; they so inflamed the imaginations of the people, that the meanest artisan, believing himself called upon to be the auxiliary of the great man, had but one thought, the ruin of England." *

The fabrications of cloths attained such high perfection during this period, that since then the only progress has been the modification of details. During this period the chemical arts of dyeing attained the excellence so characteristic of French colors; and, during this period, the mechanical genius of Jaquard, aided by the practical skill of Depouilly, produced the loom which has been justly regarded as the greatest invention in the art of weaving of the present century, and has only been eclipsed by the great achievement of our own inventor, who made the Jaquard loom automatic.† The profits acquired by successful manufacturers, during this period of prosperity, were immediately applied to the erection of vast factories, and Mulhouse, St. Quentin, Tarare, and Roubaix, at present renowned seats of the woollen manufacture, received the elements of progress and wealth which they have not since ceased to develop. Of all the conquests of Napoleon, the greatest by far, the industrial independence of France, is still secure. 1 And the assaults of British free trade are still unavailing against

^{*} Randoing, p. 11.

[†] For an account of Mr. Bigelow's great invention, see Preliminary Report of Commissioner of Patents, 1863. The report says, "It now presents a machine which is admitted to be unsurpassed by any thing which the mechanical genius of man has ever devised." p. 11.

^{‡ &}quot;Protection, the industrial creation of Napoleon, the most precious and principal cause of his conquests." Industrie des cotons, par M. Mimirel, President du Council General des Manufactures de France, etc. p. 5.

the bulwarks of protection established through his maxims and example.*

Thanks to the immortal founder of the industrial glory of France, she has never been hoodwinked by the specious philosophy of British free trade. She saw, when Mr. Huskisson suppressed the prohibitory duty upon French silk, that it was only because he could not suppress the contraband trade, and because the duty of twenty-five per cent was a more efficient protection of British silks. "When the British Parliament applaud the absolute enfranchisement of commerce," says Baron Dupin, in 1852, "they clap their hands, and these hands are covered with English gloves, whose inferiority is protected against foreign gloves by a duty of twenty-five per cent." Whenever a new manufacture, not provided for in the tariff regulations, has been attempted, the French have seen it crushed by British capitalists, who had been instructed by Mr. Brougham, that "England could afford to incur some loss on the export of English goods, for the purpose of destroying foreign manufactures in their cradle." † "Three times," says Dr. Sacc, "since the commencement of the present century, have attempts been made in France to spin the wool of the Angora goat. Each attempt has failed; for, as soon as the products appeared in the market, the English spinners lowered the prices from twenty to twenty-five per cent, and rendered competition impossible." ‡ The Anglo-French Treaty of 1860, although often referred to as evincing a change in the protective policy of France, still carefully guarded her manufactures. The Leeds Chamber of Commerce, the highest authority in relation to woollens, regarded the duties under that treaty as prohibitory. Lord Grey asserted, without contradiction, in the

[•] Tableau Statistique des Industries, Françaises du coton, de laine et de la soie, par Baron Charles Dupin, p. 9. Travaux de la Commission Française, t. iv.

[†] Report of the Commissioner of Patents for the year 1861. Agriculture, p. 17.

¹ Bulletin de la Société Imperiale Zoologique, &c., t. v. p. 579.

House of Lords, that "France retained her whole system of navigation laws. She bound herself to no duties on her manufactured goods lower than thirty per cent in the first instance, and twenty-five per cent afterwards. The only articles, on which she made any reduction, were coal and iron, which she wanted in order to stimulate her manufactures."

The condition of the woollen manufacture, under this system, must be regarded with no little interest. The number of sheep in France in 1851, according to Mr. Bernoville, who is my principal authority in the following statements, † was 40,000,000. Each fleece, upon an average, comprising the lambs, weighing, washed upon the back, about $1\frac{80}{100}$ kilogramme, the 40,000,-000 of sheep give the number of 72,000,000 kilogrammes, 158,832,000 lbs., as the whole weight of domestic wool, worth, at a minimum of 3 francs 50 centimes per kilogramme, the average of the qualities, 252,000,000 francs. The mean of importation duty paid for these years was of the value of 55,000,000 francs, making the total value of wool employed 307,000,000 francs. The value of the raw wool, which enters into the average French tissues, is estimated at one-third of the price of the tissues when they enter into the hands of the consumer. The value of the raw wool, tripled, is 921,000,000 francs, or \$184,200,000. The mean of exportation for three years before, including 1851, was 116,000,000 francs, or \$23,200,000. There remained 805,000,-000 francs, or \$161,000,000, as the value of the domestic consumption in France in 1851.

The average of French exportation of woollens from 1827 to 1836, was 38,000,000 francs. The exportation of the same fabrics in 1851 was 122,500,000 francs. Thus there was an increase of exportations in twenty years of 220 per cent. The exportations of woollens from England were, in 1830, 118,000,000 francs, or \$23,600,000; in 1851, 246,000,000 francs,

ناف نظمت احداد

[•] Bigelow's Tariff Question, p. 88.

[†] Industrie des Laines peignées, p. 135, et seq.

or \$49,200,000. The increase in twenty years was 110 per cent. While England had doubled her exportations, France had tripled hers, besides supplying her domestic consumption. Thus the acknowledged protective system of France had accomplished more for her foreign commerce than the so-called free trade of England had done for British exterior consumption. Assured by the increased prosperity of her manufactures, of the domestic consumption of all her native wools, France, while continuing the duties on her manufactures, has diminished the duty on raw materials. In 1861, her exportations of woollens amounted to 188,000,000 francs; in 1862, 221,000,000 francs; and, in 1863, to 283,000,000 francs, or \$56,000,000.

I have been able to obtain estimates of the number of persons employed in only one branch of the French woollen manufacture, that of combing wool. Mr. Bernoville* estimates that France, in 1851, employed constantly 800,000 spindles in the fabrication of combing wool; that each spindle produced twelve kilogrammes of yarn, representing nineteen kilogrammes of washed wool, worth at least 5 francs 25 centimes per kilogramme. At that, the 800,000 spindles consumed 15,-200,000 kilogrammes (83,431,200 lbs.), worth, in round numbers, 80,000,000 francs. He estimates that the various manipulations which the wool undergoes in fabrication, including the selling, adds two and one-half times to the original value of the wool, making the total cost of wool, and fabrication of combing wool, 280,000,000 francs. The 800,000 spindles produce 9,600,000 kilogrammes of yarn, representing 8,400,000 fleeces, of which 5,800,000 are produced by French sheep. It is ascertained, from the statistics of M. Billiet, that this wool, from the shepherd to the spinner inclusive, employs 51,000 workmen, who receive a total salary of 26,182,976 francs. It is calculated that two looms occupy five persons, and each wea-

[•] Industrie des Laines peignées, p. 189.

ver uses about eighty kilogrammes of spun wool. The 9,600,-000 kilogrammes give employment to 120,000 looms, which gives the number of 300,000 workmen employed in weaving. It is estimated that in dyeing, bleaching, printing, and selling, 20,000 more persons are employed. Estimating the average pay of each of the 320,000 workmen, exclusive of the spinners, at 1 franc 25 centimes a day for three hundred days' work, and adding the salary included in the spinning, Mr. Bernoville arrives at the sum of 146,000,000 francs distributed among 371,000 men, women, and children, which would allow 393 francs 55 centimes, or \$78.70 to each person. These estimates furnish data by which we may arrive at a general estimate of the number employed in all the branches of the woollen manufacture. The value of the fabrication of combing wool was 280,000,000 only of her 921,000,000, the estimated value of the whole fabrication; leaving a value of 641,000,000 in other branches. These branches, by the rates established in the estimates above given, would employ 849,000 persons, making nearly a million and a quarter as the number of persons directly employed in the woollen manufactures of France.

In studying the characteristics of the French manufacturers, and the part they have taken in advancing the general progress of the woollen industry, and in adding to the means of consumption, we observe that they have not attained that economy of production which so eminently distinguishes the British manufacturers. Supplied with abundant labor, supported by cheap sustenance, the French manufacturers have been content to remain far behind the British and Americans in the substitution of machinery for human labor. But the tendency of machinery, as they think, is to give mediocrity to manufactured products; and the French aim at the utmost excellence in their works. The individual skill or handicraft of the workman is developed to the utmost extent. All ma-

chinery is rejected which will not surpass the manipulations of the hand. Spinning, the foundation of good textures, is carried by them to the utmost perfection. Yarns, spun from combed or carded wool by the rival nations, exhibited at the great London exposition, were carried ten, twenty, and even thirty numbers higher by French spinners with the same wool.* They excel equally in ameliorating raw materials, in making them softer and more flexible. The French, in the textile arts, are creators; while the English are exploiteurs. The one nation invents new fabrics, new combinations of old materials, new styles and patterns, or what, in a word, are called French novelties. The other works up these ideas, copies, transforms, dilutes, and, above all, cheapens. Most other nations follow the English example, and our own is as yet no exception. To specify the contributions of inventive or creative genius of France to the woollen industry, we must class, first among the machines, the Jaquard, already referred to, whose wonderful products are seen in all figured textures; and next, the machinery for combing wool and also cotton, of Heilman, of Mulhouse, an invention which possesses interest, not only on account of its vast importance, but the circumstances of its origin. The most novel and valuable part of this machine, as stated by the inventor, which he had long unsuccessfully endeavored to obtain, was ultimately accomplished by carrying into mechanical operation a suggestion which occurred to him whilst watching his daughters combing their hair. He was at that time meditating on the hard fate of inventors generally, and the misfortunes which befel their families. This circumstance, says Mr. Woodcroft, being communicated to Mr. Elmore, of the Royal Academy, was embodied by him in a picture which was exhibited, and greatly admired, at the Royal Academy in 1862.† We all practise or

Bernoville

[†] Brief Biographies of Inventors, &c., p. 45.

use French creations without suspecting their origin. Before 1834 the colors of all fulled cloths were uniform. At that time Mr. Bonjean, of Sedan, conceived the idea, to give beauty to the productions of his looms, of uniting in the same stuff different tints and figures. His thought was that the domain of production would be as illimitable as that of fantasy, which was the name given to his goods. He was the originator of the product and name of fancy cassimeres, by far the most important branch of our own cloth manufacture.* The French, already skilled in making light gauzes of silk, first made bareges in 1818; † a fabric with a west of wool and warp of The English imitated the fabric by substituting cotton for silk in the warp. In 1826, Mr. Jourdain first produced, at the establishment of Troixvilles, that invaluable fabric, mousseline de laine, made of fine wool, for printing. 1 In 1831, the manufacture and printing of this tissue was fully developed. In 1838, he also created challis, made of a warp of silk organzin and a west of fine wool. \ In 1833, first appeared at Paris, simultaneously introduced by three French houses, that fabric so appropriate for the consumption of the masses, the mousseline de laine, with cotton warps. The English adopted the manufacture in 1834-5, and it prevails in every manufacturing nation. This fabric, which is unquestionably a French idea, has been an inestimable blessing. Its products are counted by millions of pieces, and it enables the most humble female to clothe herself more comfortably and becomingly, and as cheaply, with wool, as she could thirty years ago with cotton. In 1858, plain baréges were introduced, for printing. These had before been made of colored threads; at the same time, balsorine, having the effect of alternate fabrics of cloth and gauze, was created in wool in imitation of a flaxen fabric.

^{*} Randoing. Industrie des Laines foulées, p. 23.

[†] Bernoville, p. 179.

[§] Bernoville, p. 186.

[¶] Bernoville, p. 188.

[‡] Bernoville, p. 186.

^{||} Bernoville, p. 187.

foulards, with a warp of silk and west of English combing, were introduced about this time at St. Denis. The sabric, however, most appreciated by semale taste, and the most unrivalled of modern woollen textures, and the only one not degraded by imitation, is that beautiful material which derives its name from the sleece of which it is made, the French merino. This tissue was first made at Rheims, in 1801, by a workman named Dauphinot Pallotan. The invention, for which a patent was asked, whether successfully or not is not known, consisted solely in the adaptation of a peculiar type of wool, and not in the sabric. I shall refer to this sabric in another connection, to show that the intelligent skill of the agriculturalist is no less important than the genius of the artisan in developing the manufacturing prosperity of a nation.

The creative genius of the French is more conspicuous in their arts of design and color, as applied to all textile products. There is an unlimited application of these arts and a boundless field for novelties, in the modern use of printed woollen goods. All the manufacturers of France, in producing new styles of fabric or figure, nourish their tastes by Parisian ideas, the inheritance of the ancient splendors of Versailles. Says Mr. Bernoville: "At Paris, each consumer is a judge, and becomes a guide to the merchant and manufacturer. The Parisians appreciate only what is good, and consecrate only what is beautiful. The grisette as well as the grande dame, the artisan as well as the dandy, has received, and practises, without knowing it, the traditions of art."

Although important commercial houses are now established for the sale of designs elaborated in this school, there is no manufacturer in Europe who scruples to copy French pat-We have even so framed our patent laws that, while protecting all other foreign works of invention, we might appro-

[•] Bernoville, p. 185.

[†] Bernoville, p. 195.

[‡] Bernoville, p. 175.

priate with impunity the productions of the Parisian pencil and pallet.

Thus, by importation as well as imitation, all over the world, the true lovers of the beautiful, as well as "the sophists, economists, and calculators," whose advent, upon the fall of Maria Antoinette, is so pathetically lamented by Burke,* acknowledge France, so gracefully symbolized by Eugénie, the empress of taste and fashion.

I shall not attempt to review the woollen industries of the other manufacturing countries of Europe, and will confine myself to a brief notice of four other nations, the most distinguished for their resistance to the commercial policy of England. In the reports of the Bradford Chamber of Commerce for 1864-5, kindly sent me by our consul at Sheffield, Mr. Abbott, who has charge also of the vice-consulates of Bradford, Leeds, and Huddersfield, I find bitter complaints of the tariff regulations of Austria, Sweden, Spain, and Russia, as affecting, most injuriously, the woollen trade of Bradford. The Austrian tariff is spoken of as presenting "features of the most objectionable character," while "the duties are almost prohibitory, and unjust to England." The Swedish tariff is referred to as having "the unfortunate distinction of disputing with Spain the debatable honor of being the highest in the world, the Russian alone excepted." Of Russia, it is said, "the importation of manufactured tissues is practically prevented by a scale of duties higher than any in the world;" and that the value of only £46,258 of British woollens and worsteds were exported to that country in 1862. It is a matter of no little interest to us to know the manufacturing condition of the nations which have made such declarations of independence.

^{• &}quot;But the age of chivalry is gone; that of sophisters, economists, and calculators, have succeeded, and the glory of Europe is extinguished forever." — Reflections on the Revolution in France. London, 1791, p. 60.

Austria consumes about 70,000,000 pounds of wool per year, and its annual production of woollen fabrics amounts to about \$50,000,000 per year. It supplies its own population, and exports to the Levant, Asia, the United States, and even China. Its manufactures of woollens were stimulated, first, by almost absolute prohibition, and have been since encouraged by duties highly prohibitory. What is the condition of the manufacture thus aided by the national favor? Let the disinterested testimony of an English expert answer. The reporter on the class of woollens, in the London Exhibition of 1862, says: "There is no inland country in Europe which has made so much progress in woollen manufactures during the last ten or twelve years as Austria. It has not only maintained and improved its reputation for fine plain woollens, doeskins, heavy coatings, &c., but has made wonderful advances in fancy trouserings. They are no longer imitations of French, English, or other designs, but display an originality highly creditable to the manufacturer. Their woollen dyeing is the best in the whole exposition. The whites, scarlets, oranges, and other shades, possess a clearness, richness, and fulness of color, not attained by any other country."

Sweden, although enjoying few advantages of soil, climate, and position, owes to the policy which the Bradford merchant calls "a debatable honor," her present honorable place in the community of nations. Her population has steadily advanced. Her importation of foreign luxuries of food has greatly increased. Her agriculture has been developed. In the ten years ending in 1787, her importation of grain had been 196,000,000 pounds. In the decade ending in 1853, it was but 34,000,000, while the population had almost doubled. Lands have increased in value, property is divided, a taste for literature is extending, and the people have secured political representation. In the short space of thirteen years the iron manufacture had nearly doubled. The manufacture of woollens in

^{*} Carey, Manual of Social Science, p. 246.

the large establishments has been so successful that it is said that "the worsted and mixed fabrics are such exact imitations of Bradford goods that the most acute judges can scarcely distinguish the difference." The manufacture of woollen cloth is found everywhere throughout the country in the houses of the people. Compare the condition of the people of Sweden, under their system of industrial independence, with that of the population of Ireland, or of Turkey, where men, compelled to abandon weaving and spinning and gathering mulberry leaves and feeding silk worms, can earn but five cents a day,* to which condition the policy of the Bradford merchant would reduce them. "The people of Sweden," says a traveller quoted by Mr. Carey, "seem to unite, on a small scale, all the advantages of a manufacturing and agricultural population more fully than in any district I have ever seen. The men do the farm business, while the women drive a not less profitable branch of industry. There is full employment, at the loom or in spinning, for the old and young of the female sex. Servants are no burden. About the houses there is all the neatness of a thriving manufacturing, and the abundance of an agricultural population. The table-linen, laid down even for your glass of milk and piece of bread, is always clean; the beds and sheets are always nice and white. Everybody is well clad, for their manufacturing, like their farming, is for their own use first, and the surplus only as a secondary object, for sale; and from the number of little nick-nacks in their households, the good tables and chairs, window-curtains and blinds (which no hut is without), clocks, fine bedding, papered rooms, and a few books, it is evident that they lay out their winnings on their own comfort, and that these are not on a low scale of social well-being."

Spain, which also enjoys "the unfortunate distinction" of pro-

^{*} Report of the Commissioner of Patents for 1861: Agriculture, p. 12.

tecting her industry, was driven to this policy by seeing, under her colonial system, her home industry abandoned, her artisans and farmers dying out, her towns and cities decaying, and her lands monopolized by the nobles and the church. Fortunately she lost her colonies, and was compelled to look at home. Her agriculture, manufactures, and commerce, have doubled in the last twenty-five years. Provided with that wonderful breed of sheep which has been the great ameliorator of most of the flocks in the world, and which, according to the statement of Her Catholic Majesty's Secretary of State in 1854, still survives in its original perfection, Spain has made remarkable progress in her woollen manufactures, and will not be likely to abandon the system which sustains them when even English judges say of them as follows: "Upon the whole, it is evident that Spain now possesses manufacturers of great enterprise, artisans of first-rate skill, and machinery of the best and most approved kinds. The progress made by the Spanish woollen manufacturers since 1851, is of a most striking character, displaying results which bring their productions almost on a par with the most advanced manufacturers of any country. The printing of their dyes, and clearness and beauty of their blended colors, are equal to those of France, Austria, and the United Kingdom. †

Russia, which wears the crown of "debatable honor" in English eyes, was, fifty years ago, merely an agricultural nation. Manufactures began to spring up under the continental system, but were crushed by the policy of Alexander, who, at the close of the war, gave free admission to the goods of his late ally. In 1824, Count Nesselrode established the system which achieved the industrial independence of Russia. That empire has now 45,000,000 sheep, of which 18,000,000 are merinos. In 1849, the woollen industry employed 495,000 workmen,

[•] Ohio Agricultural Report, 1862, p. 498.

[†] International Exhibition of 1862. Reports of Juries, Class 21.

distributed in 9,172 establishments; besides employing a vast number in making carpets and common stuffs in the cottages of the peasantry. It supplies almost entirely the domestic consumption, including clothing for her vast army, none of which was made in the empire before 1824. In cloths alone the production is more than \$20,000,000. Russia exports even more woollen goods than she imports. In 1850, she imported woollen goods of the value of \$1,000,000, and exported to the amount of over \$2,500,000, principally to China and Central The people of Russia, employed by this and kindred manufactures, consume at home the enormous products of their agriculture. Of the 1,600,000,000 bushels of corn, which is the product of their soil, they export only 15,000,000, less than one per cent of the total cereal product. The question arises, Can manufactures, so completely exempted from foreign competition, attain that excellence which is necessary for true industrial progress? Let the English judges again answer. They say, in 1861, "Those who remember the woollen goods exhibited from Russia, in 1851, and compare them with the goods exhibited now, cannot fail to be struck with the remarkable progress made in every branch of manufacture, cloths, beavers, fancy cassimeres, mixed fabrics, and shawls, &c.; all bear evidence of the improvement, and show a degree of excellence, which, as regards make and finish, place the production of Russia on a par with some of the oldest manufacturing countries." †

The present manufacturing prosperity of these, as well as other industrial States of continental Europe, naturally suggests this inquiry, What would have been the future industrial condition of continental Europe, if, at the time when peace restored the nations to labor, the textile manufactures had been left to their own free course, and no legislation had

[·] Bernoville, Industrie des Laines peignées, p. 90, et seq.

[†] International Exhibition of 1862. Reports of Juries, Class 21:

intervened to regulate their progress? Can there be any doubt that they would have become the exclusive occupation of England? Alone in the possession of steam power and machinery; alone provided with ships and means of transport; alone endowed, through her stable legislation, with capital to vivify her natural wealth, she had absolute command of the markets of the continent. The question was presented to the continental nations, whether they should accept the cheap tissues of England, or, at some sacrifices, repel them, to appropriate to themselves the labor and profit of their production. The latter course was successively adopted, with some modifications, by each of the continental nations; and with what results to their own wealth, and the industrial progress and comfort of the world! Instead of a single workshop, Europe has the workshops of France, Russia, Austria, Prussia, Belgium, Sweden, Denmark, Spain, each clothing its own people with substantial fabrics; each developing its own creative genius and peculiar resources; each contributing to substitute the excellence of competition for the mediocrity of monopoly; each adding to the progress of the arts and the wealth and comfort of mankind.

It remains for me now to illustrate the national importance of the wool manufacture by the industry of our own country. I shall not attempt to describe the successive steps of the progress by which this manufacture has attained its present position. I can add nothing which is not already familiar to the members of this Association, or which may not be found in easily accessible sources of information. The most striking feature in the brief-history of our manufacture is its instability. As in

^{• &}quot;The trade of Germany at the beginning of the century was hides, tallow, flax, and wool, exported for cloth and cutlery in return; and Bonaparte could make their territory his fighting-ground. Since the battle of Waterloo they have been making their own cloths and cutlery; and his nephew, with more resources and stronger alliances, was obliged to keep within the line of war with Austria which the rest of Germany prescribed." Dr. Elder, The Western States, their Pursuits and Policy, p. 20.

House of Lords, that "France retained her whole system of navigation laws. She bound herself to no duties on her manufactured goods lower than thirty per cent in the first instance, and twenty-five per cent afterwards. The only articles, on which she made any reduction, were coal and iron, which she wanted in order to stimulate her manufactures."

The condition of the woollen manufacture, under this system, must be regarded with no little interest. The number of sheep in France in 1851, according to Mr. Bernoville, who is my principal authority in the following statements, † was 40,000,000. Each fleece, upon an average, comprising the lambs, weighing, washed upon the back, about $1\frac{80}{100}$ kilogramme, the 40,000,-000 of sheep give the number of 72,000,000 kilogrammes, 158,832,000 lbs., as the whole weight of domestic wool, worth, at a minimum of 3 francs 50 centimes per kilogramme, the average of the qualities, 252,000,000 francs. The mean of importation duty paid for these years was of the value of 55,000,000 francs, making the total value of wool employed 307,000,000 francs. The value of the raw wool, which enters into the average French tissues, is estimated at one-third of the price of the tissues when they enter into the hands of the consumer. The value of the raw wool, tripled, is 921,000,000 francs, or \$184,200,000. The mean of exportation for three years before, including 1851, was 116,000,000 francs, or \$23,200,000. There remained 805,000, 000 francs, or \$161,000,000, as the value of the domestic consumption in France in 1851.

The average of French exportation of woollens from 1827 to 1836, was 38,000,000 francs. The exportation of the same fabries in 1851 was 122,500,000 francs. Thus there was an increase of exportations in twenty years of 220 per cent. The exportations of woollens from England were, in 1830, 118,000,000 francs, or \$23,600,000; in 1851, 246,000,000 francs,

[•] Bigelow's Tariff Question, p. 88.

[†] Industrie des Laines peignées, p. 185, et seq.

or \$49,200,000. The increase in twenty years was 110 per cent. While England had doubled her exportations, France had tripled hers, besides supplying her domestic consumption. Thus the acknowledged protective system of France had accomplished more for her foreign commerce than the so-called free trade of England had done for British exterior consumption. Assured by the increased prosperity of her manufactures, of the domestic consumption of all her native wools, France, while continuing the duties on her manufactures, has diminished the duty on raw materials. In 1861, her exportations of woollens amounted to 188,000,000 francs; in 1862, 221,000,000 francs; and, in 1863, to 283,000,000 francs, or \$56,000,000.

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[†] Brief Biographies of Inventors, &c., p. 45.

number of sets in 1860, according to the census, was 3,319; 931 returns received at the office of the Association on the first of September,* 1865, reported 4,073 sets of cards, consuming 2,275,855 pounds weekly of scoured wool, of which 1,636,821 is domestic, and 639,034 is foreign; the weekly average per set being 559 pounds. The census returns of 1860 were complete. According to our list 608 mills remain to be heard from. Returns are coming in daily, and it is believed the number of sets will not fall short of five thousand.

Another indication of progress is the greatly increased consumption of wool. The total amount of wool produced in the United States in 1860, according to the census, was 60,264,913 pounds, all of which was consumed in our manufactures. The amount imported in that year, according to the report of Messrs. Bond and Livermore, was 32,371,719 pounds,† making the total amount consumed 92,636,632 pounds. The home product of 1864 is estimated, by the Department of Agriculture, at not less than 80,000,000 pounds.‡ The amount imported was 72,371,503 pounds.§ Total, 152,371,503 pounds, an increase of 59,734,871 pounds, or sixty-one per cent.

Not the least interesting result, which is at the same time the cause and effect of the increase of our woollen manufacture, is one eminently national; viz., that we have been able to clothe our vast army with our own fabrics, and by only the national expansion of our industry. By our looms and sewing-machines we furnished, in one year, not less than 35,174,608 garments. Mr. Bond, chairman of our "Committee on Raw Materials," estimates, from official reports received from the Quartermaster-General of the United States of the quan-

^{*} The Table in the Appendix contains the aggregate results up to Oct. 25th, 1865.

[†] Wool Report to the Boston Board of Trade for 1864, by George William Bond and George Livermore, p. 8.

[†] Monthly Report of the Agricultural Department for January, 1865, p. 22.

[§] Report of Messrs. Bond and Livermore for 1864, p. 8.

Report of Messrs. Bond and Livermore for 1864, p. 7.

tity of woollen goods purchased for the army in 1862 and 1863, that the quantity of wool consumed in our mills for army use was, in —

To this must be added the consumption for the navy, and for cartridges, and the total cannot vary much from 200,000,-000.

Compare this with the condition of the country at the commencement of the war of 1812, when the Secretary of War was compelled to ask Congress for permission to import 5,000 blankets for the supply of the Indians.

This is but one of the many illustrations which the war has furnished of the great truth of political economy, that a nation is powerful and independent, just in proportion as it cultivates a variety of industry in its people.

"The war and its incidents," says Dr. Elder,† "shed a flood of light upon the effect of a well-secured home consumption for agricultural products of every kind, of which the woolgrowing interest is an example. In the ten years before the rebellion, the sheep of Pennsylvania had decreased 12 per cent in number. In May, 1864, the Agricultural Burcau reports an increase of 76 per cent in four years. In Illinois, they had fallen off in the last census decade 14 per cent. In the first two years of the war, according to the report of the county assessors, they had increased from 769,-135 to 1,206,695, and the editor of the Chicago "Tribune" estimates the number at 3,000,000 at the close of the year 1864, an increase of two hundred and ninety per cent in four years. This immense advance is owing simply to a protective

Pamphlet entitled Free Trade in Raw Materials considered in its Effect upon all Classes of the People. New York, 1855, p. 14.

[†] The Western States, their Pursuits and Policy, p. 22.

tariff, aided by the high rate of foreign exchange and absolute possession of the home market."

I shall not enlarge further upon the American woollen industry. It may appear that I have not done it justice. It would have afforded me satisfaction to give, from original sources, special details of our manufacture; to enumerate the fabrics in which we excel; to specify the inventions which we have contributed; to do honor to the great men whose genius and enterprise have built up the pillars of our industry; to exhibit its peculiar social and economic relations in this country; in a word, to contribute facts from our manufacture to serve to illustrate the general progress of the arts. But the experience and observation of many years, instead of a few months, are necessary for such a work. It can be done, indeed, by no one man. Each one of you, gentlemen, must spare time and thought to contribute materials for such a work as shall be a worthy record and monument of your labors. In this way you will subserve the highest object of our Association.

But the time has not yet come for the woollen manufacture to vaunt of its achievements. Its career has but commenced. Its aim is nothing less than to clothe the American people with indigenous fabrics. In twenty years preceding 1862, we imported foreign woollen manufactures of the value of \$429,422,951,—an average of upwards of 19,000,000 a year. To displace the foreign manufacture, and supply a population of 35,000,000, to be doubled in thirty more years,—consuming more woollen goods than the same number of any people in the world,—a field for gigantic enterprise is opened to the American manufacturer. This consideration leads to the second branch of my subject:—The means of developing the woollen manufacture.

The requisite above all others necessary for the development of our manufacture, is a sufficient and diversified supply of the

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raw material,—wool. For this our main dependence must always be upon our own agriculture. An instinctive sentiment of patriotism leads every consumer to prefer a home product, if it will suit his purpose equally well with a foreign product. It is for the interest of the consumer to buy at home; he saves commissions, exchanges, transportation. He can select exactly what he wants, and he can sell his own products where he buys. The statistics collected by the Association show that the vast majority of the manufacturers of the country use only domestic wool. Of 4073 sets, 2171 are employed wholly upon domestic wool. Of 931 mills, 767 use domestic wool; while only 46 mills in the whole country use foreign wool alone.

So absolute is the dependence of the manufacturer of each nation upon the wool-growers of his own country, that the characteristic features of the manufactures of different nations have been impressed by the peculiar conditions of their agriculture. I will cite some examples, which will serve at the same time to show the direction towards which it is desirable our own agriculture should tend.

The sheep of England at an early period were divided into two distinctly marked classes. The one class, thriving upon the dry uplands, produced a short wool, adapted solely for making felted cloths, called clothing wool. Of this class, the original Southdown was a type. The other class, of greater size, flourishing upon the rich moist plains, produced wool characterized by great length, strength, transparency, and the little degree in which it possessed the felting property. This wool, fitted for making serges and stuff-goods, was called combing wool, from the instrument used to make the fibres straight and parallel preparatory to spinning. The type of this class was the Leicester sheep. In raising sheep of both kinds, the primary object anciently was, the product of wool; the mutton being merely accessory.

Under the old system of pasturage, it was found that but a given number of sheep could be kept on a certain space of ground; and, throughout a portion of the year, they were deficient in nourishment. Towards the end of the seventeenth century, the culture of turnips was introduced from Holland to England, with the financial and political institutions brought over by William III. Under the new system of agriculture, the artificial or turnip husbandry, a regular supply of food was provided for each season of the year, and double or treble the number of sheep could be kept upon the same land. The agriculturalists of England then began to perceive that the meat of the sheep was a more important source of profit than the wool, and that the wool must be the accessory. The revolution, which established the superiority of meat over wool, was principally due to Bakewell, of Dishley, to whom England owes hardly less than to Watt and Arkwright. Before his day, the English sheep were not fit for the butcher till about four or five years old. He conceived that if it were possible to bring sheep to their full development before that age, - to make them fit for being killed at two years old, for example, the produce of the flocks by this means would be doubled. To accomplish this, he applied to the old Leicester sheep of his neighborhood what is now the well known principle of selection in breeding, but which may be said to have originated in his brilliant experiments. So complete was his success, that the breed obtained by him, called the "New Leicester," is unrivalled in the world for precocity, produces animals which may be fattened as early as one year old, and, in every case, have reached their full growth before the end of the second year. To this invaluable quality is added a perfection of shape which renders them more fleshy and heavier for their size than any known breed. Bakewell himself was not wanting in remuneration for his labors. So great was the appreciation of his new flocks, that he let his rams for one season for the enormous

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sum of six thousand guineas. The "New Leicester," in time, came to be the most numerous and widely extended breed in all England. In many districts, they displaced the shortwool breeds; in others modified them. The extension of this breed gave preponderance to the production of the long wool with which it was clothed. The great value of Bakewell's labors consisted, not only in contributing a new race realizing the maximum of precocity and return, when placed on suitable lands, but in pointing out the means by which other indigenous races might be improved. The ancient race of the Downs, adapted for the highlands where the "New Leicester" did not thrive, originally producing short clothing-wool, was formerly of small size, and yielded but little meat, and would seldom fatten until four years old. By a careful selection of breeders, and the good winter regimen which the turnip husbandry gives, the English breeders caused the Southdown to become the rival of the "New Leicester" in early development and perfection of shape. They fatten generally when about two years old, and are sold after the second clip. But a change was also effected in the character of the fleece, which the farmers at first refused to believe. It lost the character of a clothing-wool. It became longer and coarser. As Mr. Youatt says, -- "That which was once a carding, had become a combing-wool; and useful and valuable for a different purpose. It had not deteriorated, but it had changed."* The same change, from the same cause, has been effected in the Cheviot wool of Scotland.

The result of this direction of the agriculture of England, to seek profit rather from the meat than the wool in the culture of their flocks, is truly astonishing when a comparison is made with France,—which pursues a different system,—making the meat accessory to the wool, as it is with us. Each country

[·] Youatt on Sheep, p. 227.

has an equal number of sheep. But England feeds one sheep per acre, while France feeds only one-third of a head. The produce of the English sheep is double that of the French; and the average return of an English sheep-farm is six times greater than a French one.*

The effect of this system upon manufactures is no less remarkable. The wool of England, without the knowledge or purpose of her farmers, has become a combing-wool; and the worsted manufacture, through the unconscious influence of English agriculture, has become developed to such an extent, that the towns of Yorkshire have grown up as marvellously as those of our great West.

The uses of the wool have changed. It was anciently employed principally for making says and serges,—grave stuffs for monks or mourners. It is now principally used for making light fancy fabrics for female apparel. Spencer describes envy as clad in a garment of this wool:—

"All in a kirtle of discolored say,
He clothèd was y painted full of eies." †

The female of modern times, arrayed in the bright-colored textures of Bradford, may be likened to the Fidessa of Spencer in her outward aspect:—

"A goodly lady clad in scarlet red, Purfled with gold and pearls." ‡

I need not make the application of the lesson contained in these facts to our own country. We imported in 1860 \$15,000,000 of worsteds, principally from England. We made only \$3,000,000. To replace the English worsteds we have absolutely no raw material, and depend wholly upon the Leicester and Cotswold wools of Canada. Why should not the American, as well

[•] Rural Economy of England, Scotland, and Ireland, by Leonce De Lavergne, translated from the French. Edinburgh and London, 1855, p. 27.

[†] The Faerie Queene, Book i. Canto iv.

[†] The Faerie Queene, Book i. Canto ii.

[§] The wool known in our markets as Canada wool consists wholly of fleeces from the long-wooled Leicester, Cotswold sheep, and crosses of these breeds with the South-

as the English farmer, seek a profit in mutton and wool as well as in wool alone, and thus supply the greatest necessity of American manufacture?*

Another example of this dependence of manufactures upon agriculture is found in France. The attempts of Colbert to naturalize the merino had so utterly failed, that it was believed impossible to raise or multiply this invaluable animal under the climate of France. A century after Colbert had made his attempts, Trudaine, the Minister of Finances under Louis XV., had direction of the department of commerce. Although at that time the happy effects of the administration of the Minister of Louis XIV. were evident, in the progress of French industry, the indigenous wools were all of moderate quality, and the manufacturers obtained all their choice wools from abroad. Spain threatened to organize manufactures of her own, and it was feared that France would be no longer able to obtain her choice wools. To remedy this evil, Trudaine conceived the happy thought of applying to Daubenton, already distinguished

down, recently introduced from England. Mr. Stone, of Guelph, Canada West, has taken the lead in the introduction of these sheep. The flocks in Canada are small, averaging from 20 to 50 head. It has been estimated that 6,000,000 pounds of long wool will be grown this year. Large numbers of Canada sheep have been carried to the West during the present season. The consumption in the United States of Canada wool for the present year, is estimated by Mr. Cameron, an intelligent worsted manufacturer, whose data, showing the consumption of each mill, are now before me, at 5,500,000 lbs. The success of the Lowell Manufacturing Company, in fabricating alpaca goods from Canada lustre wools, has demonstrated that the wool does not deteriorate. The Canada wool has been found equal to the best English lustre wool, imported expressly for comparison. The free wool of Canada has been an inestimable boon to our worsted manufacturers. It does not compete with the production of our own farmers, as we grow hardly more than 200,000 lbs. of long wool, while Canada consumes 300,000 lbs. annually of our clothing wool. It is not possible that our own production of long wool will keep up with the demand.

Long-wooled Flemish sheep have been recently imported from Friesland by Mr. Chenery, of Belmont. They are said, by Youatt (p. 176), to be more prolific than any English breed. Their milk is valuable, and is used by the Dutch in the manufacture of a considerable quantity of cheese of a good quality.

[•] See an excellent article, on the Condition and Prospects of Sheep Husbandry in the United States, in the Report of the Commissioner of Agriculture for the year 1862, p. 242, in which the raising of long-wooled sheep is forcibly recommended.

for his profound investigations in zoölogy and comparative anatomy at the Museum of the Jardin des Plantes, where he was associated with the illustrious Buffon. Daubenton, who had studied the question of domestic animals with Buffon, did not hesitate to accept the mission of ameliorating the domestic sheep of his own country. The government furnished him the means of establishing a sheep-fold for experiments at Montbard, his native country; and, in the space of ten years, viz., from 1766 to 1776, he had solved the problem which, for a century, had been thought impossible. He produced superfine wool from the coarse native sheep of France. "I allied," he says in his instructions for shepherds, "rams whose wool was the finest with ewes having as much hair as wool, to judge by extremes the effect of the wool of the ram upon that of the ewe. I was surprised to see issue from this cross a ram with superfine wool. This great amelioration gave me the more hope for the success of my enterprise, as it was produced by a Rousselon ram.* I had at that time had no Spanish rams." "By these experiments, continued with the greatest precautions," he continues, "I brought all the races of my sheepfold to the degree of fineness of Spanish wool without using any Spanish stock." He caused his wools to be made into fabrics at the Gobelin manufactory, and the stuffs were pronounced to have all the fineness of those made with Spanish wools with more nerve and strength. Convinced by this success, Louis XVI. obtained from the King of Spain, in 1786, a flock of merinos, which he placed at Rambouillet, under the direction of Daubenton. Enlightened by his previous labors upon the domestic sheep, the practical naturalist found no difficulty in acclimating and ameliorating the Spanish race. The flock at Rambouillet was multiplied. It furnished an example and supplied reproducers, which were spread everywhere throughout A school of shepherds was organized; other national France.

^{*} The finest of French native breeds. Noveau traité sur laine, p. 67.

sheepfolds were founded, and the merinos were established in France. Daubenton continued to publish treatises upon their management. Even fifty-three years after his first labors, when 84 years old, he addressed the Institute in relation to experiments upon sheep which he was then carrying on.

^{*} One of the most interesting results of the acclimatation of the merinos in France is the creation of a new and perfectly fixed race, remarkable for its silky wool, called the Mauchamp race. In 1828, there was accidentally produced at the farm of Mauchamp, cultivated by M. Graux, a ram, badly and even monstrously formed, having a head of unusual size and a tail of great length, but having a wool remarkable for its softness, and above all for its lustre, which resembled that of silk. This was the second animal of the kind which had been born in the flock of merinos at Mauchamp; the first had been killed by the mother. Mr. Graux separated it from the flock, and raised it apart, to prevest any accident, and used it for reproduction; obtaining some animals similar to the sire, and others to the dam. Taking afterwards the animals similar to the sire, and crossing them among themselves or with the sire, which served as a type, he succeeded in forming, little by little, a small flock of animals whose wool was perfectly silky. When he had arrived at this result, he occupied himself in modifying the forms, which he easily accomplished; and finally in modifying the size, originally quite small, but which is now the same as that of ordinary French merinos, - rams of three years old weighing as much as 80 kilogrammes, and a flock of six hundred head producing on an average two kilogrammes of wool washed on the back. As with all innovators, M. Graux met on all sides detractors of his discovery. The farmers pretended that the silky type could not be preserved when transported from Mauchamp; and the manufacturers asserted that the wool was so pliant and slippery that nothing could be done with it. They even complained of the very qualities which distinguish it. It is probable that the discoverer would have renounced the development of this magnificent race, if he had not been encouraged by an annual subvention from the government, obtained by M. Yvart, the Inspector-general of the imperial sheepfolds. In 1853, M. Davin, a manufacturer distinguished for his zeal and skill in introducing new material to the textile arts, experimented upon the material rejected by others. He succeeded in making magnificent stuffs which excited the admiration of all connoisseurs. They exhibited, in the tender colors especially, reflections of light which had never been before observed, and a softness which had never been found in any material of wool of any degree of fineness. The silky lustre was so marked, that, in a challis made with a silken warp and weft of Mauchamp wool, although the stuff contained only one-eighth of silk and seven-eighths of silky wool, it was as brilliant as if made entirely of silk. Merinos, mousselines, satins of China, and shawls, made of this material, equalled, if they did not surpass, analogous products made of the finest Cashmere yarns. The commission of savans, who reported upon the qualities of this new race to the Imperial Society of Acclimatation, say: "The silky wool is destined to replace completely in our industry the Cashmere which comes from Thibet. It is fully as brilliant as Cashmere, fully as soft; and, while it costs less as a raw material, it requires less manipulation to be transformed into yarn, since it does not contain the hair (jarre), which must be removed from the Cashmere." In 1857, a medal of the first class was decreed to M. Davin for his industrial application of this material; and the society above referred to has proposed a prize of 2,000 francs for a flock of one hundred animals of the silky type. Bulletin de la Société Imperiale Zoologique d'Acclimatation, t. v. p. 118, also t. vi. p. 502.

Although it was scarcely before the establishment of the empire that the advantages of the new race began to be understood, one-fourth of the sheep of France consist at present of merinos from this stock. The merino of France has become. through the culture of her agriculturalists, one of the most distinct of the merino races. In size and weight of washed wool it surpasses all other merinos, and their French savans say of them, "We are at present the first in the entire world for the fineness and quality of our wools, and the beauty and good conformation of the merinos which produce them." Within even the present year the Imperial Zoölogical Society of Acclimatation, at the instance of its President, - the illustrious Drouyn de L'huys, the Premier of Napoleon III., - has dedicated a statue to the great naturalist who endowed France with this magnificent legacy, to prove, in the language of its Vice-president, "that no true glory passes unperceived, that every serious servitor of his country and humanity receives sooner or later his just recompense." *

What has been the effect of this agricultural achievement of France upon the character of her fabrics? The high culture of the French sheep for the purpose of obtaining great size and weight of fleece, has done for the merino in France what it did for Southdown in England; it has added length to the fibre, and made it a genuine combing-wool.† Its value for this pur-

M. Richard, Vice-president of the Imperial Society of Acclimatation. See Bulletin de la Société Imperiale Zoologique d'Acclimatation, 2 Sevie, t. i. November, 1864, p. 647, et seq.

[†] Although the prevailing character of the French fleeces is as above described, a breed of sheep has been cultivated to a limited extent in France which rival in fineness of wool the most reputed flocks of Saxony. They are called the sheep of Naz, and have been cultivated by an agricultural association of that name for over sixty years. The original nucleus of the flock was derived from the most ancient of the Royal Cabanas, and the flock has been increased without any admixture of foreign blood. The flock in 1840 had been reduced to about 500 head, but the wool still preserved its reputation for fineness, softness, force, and elasticity. The price at that time was about five francs the kilogramme for wool in the yolk, which was double the price of the wools of Rambouillet. The average weight of the fleeces is a little less than two kilogrammes, or about 4 lbs. Gen. Lafayette raised sheep of this race at La Grange; and

pose is thus pronounced by one of the most eminent of the practical manufacturers of France:—

- "There are two facts we ought to proclaim abroad.
- "The first is, that without the introduction of the Spanish race into our flocks, and without all the skill of our agriculturists, we should still vegetate in dependence upon neighboring nations, and should be reduced to clothe ourselves with their stuffs. It is to the admirable revolution in the raising of ovine animals that we owe the beautiful industry of spinning the merino combing-wools. It is to this that we owe the splendor of the industries of weaving combing-wool at Paris, at Rheims, at Roubais, at Amiens, and St. Quentin.

"The second fact is, that the aspect, the quality, the character of our modern tissues, in a word, all that makes them deserve, for forty or fifty years, the name of new inventions, is due principally to the particular nature of the combing-wool obtained by the Spanish cross. There are few, very few inventions, in the contexture of the stuffs, or in their mounting upon the looms, which are still the same as in the 18th century. It is because it has been favored by the wool of merinos that the 19th century has changed the physiognomy of the tissues of preceding ages."

Before inquiring what profit our manufacturers can derive from these facts, I wish to cite an American example of the influence of agriculture upon our manufactures, and pay homage to an American name less widely known but hardly less deserving of honor than those of Bakewell and Daubenton.

Col. Humphreys, who had been a member of Washington's family at his home on the Potomac, and had been imbued with a taste for agriculture by the immortal farmer of Mt. Vernon, having been afterwards Minister to Spain, made the first im-

in a letter to Mr. Skinner, in 1828, recommends their introduction into the United States. — New England Farmer, vol. vii. p. 92. See Bulletin de la Société d'Acclimatation, vol. vii. p. 479.

Bernoville, p. 165.

portant importation of pure merino sheep from the Spanish cabanas. In 1813, Stephen Atwood, of Woodbury, Connecticut, bought a ewe of Col. Humphreys. He bred this ewe and her descendants with rams in his neighborhood, which he knew to be of the bure Humphreys's blood, until about 1830, after which he uniformly used rams from his own flock. This flock gaining much public favor, although full of what would be now regarded deficiencies, attracted the attention of Edwin Hammond, a farmer of Middlebury, Vermont, who made considerable purchases of Mr. Atwood's sheep in 1844 and 1846. A distinguished member of this Association, whose invaluable contributions to American-sheep husbandry place him by the side of the illustrious Von Thaer in Germany, thus describes the physiological achievements of Mr. Hammond: "By a perfect understanding and exquisite management of his materials, this great breeder has effected quite as marked an improvement in the American merino as Mr. Bakewell effected among the long-wooled sheep of England. He has converted the thin, light-boned, smallish, and imperfectly-covered sheep above described, into large, round, low, strong-boned sheep, models of compactness, and not a few of them models of beauty, for fine-wooled sheep.* I examined the flock nearly a week in February, 1863. They were in very fine condition, though the ewes were fed only with hay. Two of them weighed about 140 lbs. each. One of the two largest ewes had yielded a fleece of 17½ lbs., and the other, 14½ lbs., of unwashed wool. The whole flock, usually about 200 in number, — with a due proportion of young and old, including say two per cent of old rams, and no wethers, - yields an average of about 10 lbs.

^{*} It was stated at a public discussion at the Vermont State Fair, in September, 1865, that Mr. Hammond was offered \$2,000 for his celebrated ram Gold-drop, but the owner refused to sell him. He alone possessed the characteristics he had been striving for for years. The President of the Society stated that Mr. Hammond was present when the lamb, which became so valuable, was dropped. He turned it over, and examined it with the warmest admiration, and exclaimed, "Welcome! I have been looking for you fifteen years and more, and now I have got you." — Boston Evening Courier, Sept. 16th, 1865.

of unwashed wool per head. The great weight is not made up by the extra amount of yolk" (although it must be admitted that this is not the prevailing opinion of manufacturers), "but by the extra length and thickness of every part of the fleece. It is of a high medium quality, and very even. In every respect this eminent breeder has directed his whole attention to solid value, and has never sacrificed a particle of it to attain either points of no value or less value."* The genius of the American breeder received its crowning honor at the International Exhibition at Hamburg, in 1863. Sheep bred from Mr. Hammond's stock, exhibited by Mr. Campbell, - "among 350 competing sheep from Austria, Prussia, Germany, and France, - received a first prize for the best ram, a second prize for the second best ram, and a first prize for the best ewes." † The fleeces of the Vermont breeds may be regarded as types of the American merino fleece, and the character of this wool has exerted a marked influence upon American manufactures. It is not a clothing-wool, for the American merino wool exceeds all other merino wool in length. The wool exhibited at Hamburg was from 25 inches to 31 inches long; and, according to German authorities on wool, 11 inches is the extreme limit for the length of clothing-wool for the filling. # Hence we have comparatively no manufactures of broadcloth. American merino wool is fitted for fancy cassi-

[•] The Practical Shepherd, by Henry S. Randall, LL.D., p. 29.

[†] See extract from the official record of awards, published in the Rural New Yorker, September 9, 1865. The class of merinos in which Mr. Campbell's were shown was "stocks which have been bred with especial reference to quantity of wool."

^{‡ &}quot;A length of 1½ inches may be regarded as the extreme limit for card (clothing) wool. It is true a longer wool may be used, but then it is only for the warp of the tissues, and the wool required for this purpose is only two-fifths of the quantity employed." Traité des Bêtes Ovines par Aug de Weckherlin. Intendant de Prince de Hohen Zollern, p. 90.

[§] Since the above statement was made, I have learned that it requires a material qualification, and I am happy to say, that a name identified with the establishment of the cotton manufacture in the United States is to be associated with the revival of the

meres, in which we excel; for fine shawls, in which we have attained great perfection; for mousselines de laine, which we have of great excellence, and which we owe to our American fleeces. The true value of the fleece of the American merino is for combing purposes, for which it has remarkable analogy with that of France. This country will never know the inestimable treasure which it has in its fleeces, until American manufacturers appropriate them to fabricate the soft tissues of merinos, thibets, and cashmeres, to which France owes "the splendor of the industries of combing-wool at Paris, Rheims, and Roubaix." Although our main dependence for raw material must always be upon our agriculture, it supplies but little more than three-fourths of our wants, and it is probable will never supply it wholly. Our farmers will probably never attempt to supply the cheap coarse wools which Egypt and South America furnish, nor will they soon abandon the lusty merinos for the small and delicate Saxons.* For our very coarse, and, for some time to come, for our very fine, and for our long wools, we must depend upon the foreign market. Our manufactures certainly cannot be extended unless we can be on some terms of equality with foreigners who have no restriction in the supply of raw materials; for all the principal

broadcloth manufacture in this country. During the present year the Webster Woollen Manufacturing Company, under the auspices of Mr. H. Nelson Slater, has established, on a very large scale, the manufacture of broadcloths, which rival the best German fabrics.

^{*} I refer to the wool growers of the north and west. With the auspicious advent of free labor, an inviting field for fine-wool husbandry is opened on the Appalachian slopes of the Southern States, and the prairies of Texas. I have the authority of Mr. Gilbert, of Ware, whose opera cloths, made of the finest Saxony and Silesian wools, have replaced the best French goods in the New-York market, for saying that most admirable fine wools have been grown in the "Panhandle," Virginia. Judge Baldwin, the late eminent examiner in the class of "Fibres and Textiles" at the U. S. Patent Office, and formerly a practical flockmaster in Tennessee, assures me that the culture of fine-wooled sheep can be pursued to the utmost advantage in the Southern States. Cotton may not be king even in its own vaunted domain.

For the best history extant, in our language, of the fine-wool husbandry of Germany, the reader is referred to the article of Mr. Fleischman in the U. S. Patent Office Report for 1847.

manufacturing nations of Europe have practically thrown open their markets to the raw material of manufacture.* I will refer to but one instance of the impolicy of even the present comparatively moderate restrictions upon raw material. We have already constructed, in this country, machinery adapted for the manufacture of bunting, webbing, braids, and bindings, sufficient to make all required in the United States. The long combing-wools required for these manufactures cost in England 35 cents, and pay a duty of 12 cents and 10 per cent, averaging about 45 per cent. Two pounds of wool are required to make a pound of worsted, and the revenue tax on the manufactured goods, therefore, equals 12 per cent on the raw material. Without any duty on the imported worsted, the foreign manufacturer would have an advantage of 57 per cent. The duty on bunting, made wholly of worsted yarn, is 50 per cent. The foreign manufacturer has therefore an advantage at present of 7 per cent in the manufacture of bunting. A large portion of the worsted yarns now made, enter into the fabrication of those beautiful goods called fancy hosiery goods, zephyrs, nubas, &c., - for which the manufacturers of Phila-The only protection which the delphia are so celebrated.

[•] Rates of duty on wool imported into the principal manufacturing nations of Europe, according to the Customs Tariffs of all nations, up to the year 1855:—

Great Br	itai	n	•	•	•		•	•		•				•	Free.
France (Tar	iff	of	186	30)										"
Belgium															"
Zollverei and 21	n, i otl	nc ier	lud St	ing t at e	; l'	rus	sia	, s	ax	ony •	·, }				"
Netherla	nds	ı												•	"
															20 copeks per pood or about 2 cents per pound.
Austria	•	•									•	•	•		{ 2d. per centner (or 123½ lbs. avoirdupois.)
Spain .			•	•											Common 35s, 5d, per 100 lbs.; Saxon, 23s, 9d, per 100 lbs.

manufacturer has, is his superior taste and knowledge of the styles which will suit the American fancy. The English manufacturers are not quick enough to learn our styles; although it is said they had given large orders for Philadelphia hosiery to imitate our fashions. One mortifying result of this absolute discrimination in favor of the English worsted manufacture is, that we actually make no bunting. To our shame be it spoken, all our flags are grown, spun, woven, and dyed in England; and on the last 4th of July, the proud American ensigns which floated over every national ship, post, and fort, and every patriotic home, flaunted forth upon the breeze the industrial dependence of America upon England!*

I do not propose to discuss the question of the free admission of raw materials, or the relative duty on wool and woollen fabrics. Most of us, as manufacturers, believe that so long as the home product of wool is inadequate to the supply of our machinery, the only protection which can avail the wool-grower must include protection to the manufacturer; and that any policy which deprives the manufacturer of the home market for goods, tends to deprive the grower of the home market for wool, and to oblige him to compete in the general markets of the world with other wool-growers; and that the only reliable protection of the wool-grower is in the ability of the manufacturers to convert his clip into goods which will command the home market. We believe that the mutuality of the dependence of the two industries has been demonstrated by the experience that the wool-growers have always been prosperous when the prosperity of the manufacturing interest secured them a home market, and that the seasons of depression have been only when the depression of manufacturing has diminished the home demand.+ But it is not enough for us to believe, or

^{*} My principal authority for these statements is Mr. Allen Cameron, of the Abbott Worsted Company, Westford, Mass.

[†] See argument of Mr. Rowland G. Hazard in behalf of the Rhode Island woollen manufacturers before the Committee of Ways and Means, May 11, 1864. These views

even prove all this. There can be no reliance upon a permanent friendly legislation for both interests unless the woolgrowers are satisfied. Our object is not to reach Congress, but / to convince the farmers of the West, who will inevitably control the legislation of this country, of the absolute identity of our interests. The most important means of extending our manufacture, therefore, is to establish friendly relations with the wool-growers. How shall this be accomplished? them understand that, while, individually, the manufacturers will follow their commercial instincts in buying at the cheapest market, they utterly repudiate all associations or combinations to lower the market price. Let manufacturers be more careful in the selection of their agents for purchasing wool, or let them go themselves into the agricultural districts and become acquainted with the farmers and their flocks. If there is any rule of the trade which operates inequitably towards the wool-grower, let it be abolished. The complaint has been made by the wool-growers, that the rule that all wools shall be

are not confined to manufacturers. I find the following in the New-England Farmer, April, 1828, vol. vi., p. 298: - " Mr. Mallary, of Vermont (a wool growing State), in his speech on the tariff bill, reported by the Committee on Manufactures, opposed the proposed additional duty on wool costing eight cents per pound and under. He said such wool was not and would not be produced in this country. The farmers of Vermont would not grow wool worth ten or twelve cents, when they could as well produce that which may be worth forty or fifty cents. This coarse, imported wool is made into negro cloths and inferior baizes and flannels. The manufacture of it is established, and ought not to be driven from the country and given to foreigners. The proposed duty would amount to more than 100 per cent, and would ruin the manufacturer of coarse fabrics at a blow, without benefiting the farmer. If the latter should raise wool worth eight or twelve cents, he could not find a market for it. He was also opposed to the other provisions of the bill respecting wool and woollens. The charge on wool was too high, or that on woollens was not high enough; and this disproportion would inevitably ruin the manufacturer and with him the wool grower. If the farmer could not purchase the wool of the latter, it would be in vain to purchase it. The markets of Europe are full of wool, and prices are very low. The English wool-growers are petitioning Parliament for a duty on foreign wool, but their petitions will not be granted. The English woollen manufacturers will receive every encouragement, and will be able to sell their goods at the lowest rate possible so long as there is a prospect that they can break down the American manufacturers. Should they succeed in accomplishing that object, they will then raise their prices, and we must pay them."-Hampshire Gazette.

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washed, or subjected to a deduction of one-third, to put them upon a par with brook-washed wools, operates unequally and I am happy to say that this subject has been entrusted to a committee of this Association, and will, doubtless, receive the action of this body. Let our manufacturers interest themselves directly in the production of desirable varieties of wool. What could be a more becoming or practical contribution from our manufacturers to agriculture, than the offer of a really munificent prize for the best flock of fifty English long-wooled sheep, born and raised in this country, or the best flock of Angora goats?* A practicable mode of extending amicable relations between the two industries is suggested by what has been done in Germany. In 1823, the illustrious Von Thaer, the great sheep-breeder of Germany, invited all the flock-masters and wool-manufacturers of Germany to meet at Leipsic, and visit the exposition of wools which has since become so important. He urged them to enlighten each other mutually in respect to their reciprocal interests, and to receive precise indications of the demands of manufacturers. This congress convened, and was continued from year to year, and contributed essentially to preserve the reputation of German wools and cloths. An important result of this congress was the adoption, in 1848, of a fixed terminology for the raising of sheep and knowledge of wools.† It is

^{*} The Angora goat, wholly unknown to the ancients, and first described by Belon in the sixth century, is diffused around the mountains of Thibet, and beyond the central plains of Asia from Armenia to Chinese Tartary. The district of Angora, where it most abounds, is described as a country with a dry atmosphere, and very hot summers, and very cold winters,—the mercury descending to 20 degrees centigrade. The number of head in the district of Angora is estimated at from 400,000 to 500,000, and the product of wool at 2,000,000 pounds. Formerly the wools of Angora were spun and woven in the place, and were exported in the form of yarns and camlets, of which the city of Angora sold, in 1844, 35,000 pieces to Europe. The exportation of the wool called tifit in Turkey, and mohair in England, was prohibited, and the native spinners and weavers were protected against the machinery of Europe. Some 1200 looms were employed. The natives displayed great skill in making gloves and hosiery, and summer robes of great beauty for the Turkish grandees. The town flourished, and the whole population

[†] Wecherlin, Traité des betes ovines, p. 25.

believed that a convention of delegates from the respective associations of wool-growers and manufacturers in this country would have the happiest effect upon the harmony of both interests, and might accomplish important practical results, not the least of which would be the adoption of a fixed terminology for the description and knowledge of wools in our own markets and farms.

The surest means of developing our industry rests with the manufacturer alone. It is for him perpetually to aspire to the utmost excellence in his products. I need not say that the manufacturer who suffers his goods to run down will inevitably bring down with them his credit and his fortune. I need not say that the trade-marks on your goods should be like the tower mark on old silver, the stamp of the true metal, or the marks on Swedish iron, recognized all over the world as infal-

was employed and happy in the pursuit of their beautiful industry. The Turkish Government was tempted, by British influence, to admit, free of duty, the products of European machinery, and to permit the export of the raw tiftik. This fatal step was the deathblow to the town of Angora. Instead of 1200, not more than fifty looms were employed; the retail merchants, weavers, hand-spinners, and dyers, were ruined, and the city, having at its command all the raw material for a most important and characteristic manufacture, offers, in its sad decline, another monument of the desolating influence of that system which would make the raw material of every country tributary to the one great workshop of the world. Nearly all the product of Angora wool is now exported to England, and is spun into varns which are largely exported to France. They are used for the manufacture of Utrecht velvets, lace, braid, fine shawls, &c. Vigorous attempts have recently been made on the continent of Europe, especially in France, to acclimate this species; but nowhere have they succeeded as in the United States. The first importations of seven head were made about seventeen years ago by Dr. Davis, of South Carolina. About three hundred have been imported since. Their progeny, with crosses, is said by Mr. Diehl to number several thousand, scattered in flocks of from 12 to 300 hundred head, principally in the south-western States. A flock imported this season by Mr. Chenery, of Belmont, Mass., which I have examined, is in excellent condition. This flock numbered ten when it started, and fourteen upon arrival at Boston. They were driven 800 miles to Constantinople, and were seven months upon the voyage, but arrived in good health. The value of the wool in the market is now about \$1.25 per pound (not \$6 to \$8, as stated in the Agricultural Reports). The agent of the Abbott Worsted Manufacturing Co., Westford, Mass., informs me that he has similar machinery for spinning this wool to that used in the celebrated establishment of Titus Salt, of Bradford. - See article by Israel S. Diehl, U. S. Agricultural Report, 1863, p. 216. Southey on Colonial Wools, p. 322, et seq. Bulletin de la Société d'Acclimatation, t. v. p. 569.

lible seals of uniform excellence. The credit of your mills and the honor of your houses will be the most certain fortunes for yourselves and the best legacies to your sons. But it is not enough that you should be content to keep up the old standard of your goods. The highest attribute of humanity is the passion for perfection, the aspiration for some unattained ideal. The noblest men stamp these aspirations upon all their earnest works; they are then no longer workmen, traders; they become artists. Art is not found alone in painting and sculpture. It is the domain of Minerva, who gave the distaff, as well as of the Muses. The lover of art sees it in "the Stones of Venice," the iron scroll-work and armor of the middle ages, and in the old tapestries of Versailles, - in every work of man's hands which bears the impress of his soul. The sturdy honesty of the English clothiers of former times, and their workmanlike fidelity to the canons of their ancient guild, made the oldfashioned cloth of England as sound and solid as English oak. A higher sentiment, a passion, as it were, for an ideal fineness and nobility of fibre, incited the German flock-masters to create the unparalleled cloth wools which have given Silesia the crown of the "golden fleece." A passion for an ideal perfection of tissues inspires the master weavers and spinners of France in their perpetual strife to conquer new fields for her industrial glory. It impels them to add, each year, to the fineness and softness of their threads, and the perfection of their tissues, till their fabrics have become models which the spindles and looms of all other nations are content to simulate, but fail to imitate. All American industry needs to be vivified by such aspirations. Every earnest worker with such a purpose is a blessing to his country and race. As Mr. Ruskin said, in his art lecture to the manufacturers of Bradford, "If you resolve from the first, that, as far as you can ascertain what is best, you will produce what is best, on an intelligent consideration of the probable tendencies and possible tastes of the people whom

you supply, you may literally become more influential for all kinds of good than many lecturers on art, or many treatisewriters on morality." I will add: By such noble work you rise above the sphere of common labor; you become more than workmen, - more than artists, - you become creators, imitators, though humble, still worthy, of the great Worker, the infinite Maker. Indulge me a moment longer while I give you, in the eloquent words of a great teacher now passed away, the supreme example which is set for your labors.* "A thoughtful man for the first time goes to some carpet-mill in Lowell. He looks out of the window and sees dirty bales of wool lying confusedly about as they were dropped from the carts that brought them there. Close at hand is the Merrimac River, one end of it pressed against the New-Hampshire mountains and the sky far off, while the other crowds upon the milldam, and is going through its narrow gate. Under the factory it drives the huge wheel, whose turning keeps the whole town ajar all day. Above is the great bell which rings the river to its work. Before him are pullies and shafts. The floor is thick set with looms. There are rolls of various colored woollen yarns; bits of card, pierced with holes, hang before the weaver, who now pulls a handle, and the shuttles fly, wedding the woof to the expectant warp, and the handsome fabric is slowly woven up and rolled away. The thoughtful man wonders at the contrivance by which the Merrimac River is made to weave such coarse materials into such beauty of form and finish. What a marvel of machinery it is! None of the weavers quite understand it, - our visitor less. He goes off, wondering what a head it must be which made the mill a tool by which the Merrimac transfigures wool and dye-stuffs into handsome carpets, serviceable for chamber, parlor, staircase, or meeting-house."

"But, all day long, you and I, . . . and all the people in the

[•] Lessons from the World of Matter and the World of Man, by Theodore Parker. Boston. 1865. p. 51.

world, are in a carpet-factory far more wonderful. What vast forces therein spin and weave continually! What is the Merrimac River, which only reaches from the New-Hampshire mountains to the sea, compared to that river of God, on whose breast the earth, the sun, the solar system, yea, the astral system, are but bubbles which gleam, many-colored, for a moment, or but dimple that stream, and which swiftly it whirls away? What is the fabric of a Lowell mill to that carpet which God lays on the floor of the earth from the Arctic Circle to the Antarctic, or yet also spreads on the bottom of the monstrous sea? It is trod under foot by all mankind. The elephant walks on it, and the royal tiger. What multitudes of sheep, swine, and horned cattle, lie down there and take their rest! What tribes of beasts, insects, reptiles, birds, fishes, make a home there, or feed thereon! Moths do not eat away this floor-cloth of the land and sea. The snow lies on it. The sun lurks there in summer, the rain wets it all the year: yet it never wears out; it is dyed in fast colors. Now and then the feet of armies in their battles wear a little hole in this green carpet; but next year a handsome piece of botanic rug-work covers up the wear and tear of Sebastopol and Delhi, as of old it repaired the waste of Marathon and Trasimenus. Look! and you see no weaver, no loom visible; but the web is always there on the ground and under the sea. The same Clothier likewise keeps the live world tidy, and in good trim. How all the fishes are dressed out, - those glittering in plate-armor, these only arrayed in their vari-colored jerkins, such as no Moorish artist could paint! How well-clad are the insects. With what suits of mail are beetle and bee and ant furnished. The coat of the buffalo never pinches under the arm, never puckers at the shoulder; it is always the same, yet never old fashioned, or out of date. . . . The pigeon and humming-bird wear their court-dress every day, and yet it never looks dusty nor threadbare. grand clothiery of the world, everything is clad in more beauty

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than many-colored Joseph or imperial Solomon ever put on, yet nobody sees the wheel, the loom, or the sewing machine of this great Dorcas institution, which carpets the earth and upholsters the heavens and clothes the people of the world with more glory than the Queen of Sheba ever saw in her dream of dress and love."

APPENDIX.

Secretary's Official Beyort.

THE By-laws of the "National Association of Wool Manufacturers" make it the duty of the Secretary to prepare, under the direction of the government, an annual report of the transactions and condition of the Association. The following is submitted in conformity with this requirement:—

The want of some organization, capable of united and systematic action, having long been felt among those engaged in the woollen manufacture, a circular was addressed, on the tenth day of August, 1864, to those most directly interested in the matter. In response to this call, a large number of the leading wool manufacturers of the country, from Ohio, Pennsylvania, New York, New Jersey, Maryland, Delaware, and from each of the six New-England States, assembled in convention at Springfield, Mass., on the twelfth day of October, 1864. The Convention at that time resolved that it should proceed to the formation of a "National Association of Wool Manufacturers." To carry this resolution into effect, a committee was appointed to prepare a plan of organization, and report at an adjourned meeting of the Convention, to be held on the 30th of November following. The Convention having met on that day, and having been dissolved, the Association was organized by adopting Articles and By-laws which had been presented by the Committee, and by choosing officers as therein described. Meetings of the government, provided for in the By-laws, were successively held at Boston, Mass., on the twenty-first day of December, 1864; at New York, on the fifteenth day of March, 1865; at New York, on the seventeenth day of May, 1865; at Newport, R.I., on the twenty-sixth day of July, 1865; and at Philadelphia, on the 6th of September. These meetings were all numerously attended. At all of them interesting discussions took place upon questions relating to the interests of the Association. Committees were also appointed, having in charge the more important matters to be acted upon by the government. By the direction of the government, a statement was prepared by the President of the "Objects and Plan" of the Association. This has been printed and extensively circulated. It was regarded by the government, that the first and most important duty of the Association was to obtain information of the actual condition of the woollen manufacture throughout the United States. With great labor, a list of all persons known or believed to be engaged in the woollen manufacture was prepared. Circulars containing such interrogatories as would draw forth the desired information were sent to all persons on this list, about 1,700 in all; 931 returns have been received, representing 4,073 sets of machinery, and returns are coming in daily. It is believed that by this means the Association will be in possession of complete and accurate statistics of the woollen machinery in operation in this country, the amount and description of wool consumed, and the quantity and character of goods manufactured, - information indispensable for wise and just legislation in matters affecting our interests. It is believed that no inquiries at present pursued by the national Government will furnish a basis for such legislation. It is the object of the government to place the Association upon such a basis that it shall have weight in our national councils, and that the interests of all the woollen manufacturers of the country shall be fully represented and cared for. The government believe that they have accomplished all that could have been expected in the few months of the existence of the Association, in completing its organization and arranging its machinery. They have not deemed it wise to attempt too much, or to make a display of their operations. The value of such an organization exists most in its silent and hardly appreciable influence; and time and patience are necessary to secure that which is really useful and permanent. The Association consists, at present, of 201 members; a number which, it is hoped, may be greatly increased when our "Objects and Plans" are more fully known.

Respectfully submitted,

JOHN L. HAYES, Secretary.

TABLE,

Showing the Value of Woollen Goods manufactured in the United States, for the Year ending June 30, 1864. Calculated from Official Report of United-States Commissioner of Internal Revenue.

STATES.	Manufacturers of WOOL not otherwise pro- vided for.	Clorbs, and all Textile, Knitted or Felted Fabrics of WOOL, before dyed, printed, or prepared in any other manner.	Manufacturers of WORSTED not otherwise pro- vided for.	TOTAL
W	Dollars. 8,288,098.67	Dollars. 288,885.00	Dollars.	Dollars. 8,476,488.67
Maine	, ,	,		
NEW HAMPSHIRE	9,044,762.00	84,915.00		9,079,677.00
VERMONT	8,145,988.67	562,788.00		8,708,721.67
MASSACHUSETTS	88,905,899.00	800,531.33	897,720.67	40,608,651.00
RHODE ISLAND	2,968,154.33	7,668,581.67	261,014.88	10,892,700.88
Connecticut	11,878,768.67	8,918,965.00	78,912.88	15,866,641.00
NEW YORK	10,850,180.00	2,214,802.67	912,792.88	18,977,775.00
NEW JERSEY	2,752,652.00	25,861.67	70.88	2,778,084.00
Pennsylvania	18,022,447.83	8,502,190.00	75,076.00	16,599,718.85
DELAWARE	548,184.67			548,184.67
MARYLAND	450,885.88	1,526.67		451,912.00
WEST VIRGINIA	58,486.00	5,267.00		68,758.00
Kentucky	117,584.83	242,870.67		859,906.00
Missouri	72,980.00	2,864.00		75,844.00
Оню	1,815,248.00	85,684.67		1,400,877.67
Indiana	545,128.88	11,794.88	1,692.67	558,615.81
Illinois	841,907.00	11,384.00	5,798.88	859,084.81
Michigan	118,094.00	88,754.88		151,848.8
Wisconsin	104,457.67	860.00		106,817.67
Iowa	102,815.67	15,489.67		118,305.31
MINNESOTA	8,696.00	450.00		9,146.00
KANSAS	14,947.67			14,947.6
California	588,956.00			588,956.00
	128,620.67			128,620.67
Oregon	45.67			45.6
		·		121,868,350.8

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STATEMENT OF AGGREGATE RESULTS,

OBTAINED UP TO OCTOBER 25, 1865.

ply to Circulars of Feb. 24, 1865, and May 30, 1865, addressed to Wool Manufacturers.

STATES.	Returns Re- ceived.	Sets Re- ported.	Weekly Consumption of Scoured Wool, in Pounds.	Weekly Consumption of Domestic Wool, in Pounds.	Weekly Consumption of Foreign Wool, in Pounds.	Per- centage of Foreign Wool.	Average Woekly per Set.	Mills to be heard from
	40	177	98,885	74,120	19,715	197	580	11
AMPSHIRE	69	861	217,110	174,841	42,269	191	601	28
KT	89	112	50,217	82,652	17,565	85	448	19
HUSETTS	186	1,467	857,496	560,896	297,100	841	585	74
Island	61	840	188,775	152,967	85,808	19	555	15
TICUT	88	452	252,880	125,486	127,894	50}	559	48
ORE	154	576	286,510	174,586	61,974	261	411	124
ERSEY	11	64	88,660	25,2 88	8,422	25	526	7
TLVANIA:								
adelphia	24	68	88,200	68,650	19,550	221	1,297	98
ainder of the State .	57	90	89,054	89,054			484	69
ARE	6	15	14,050	13,050	1,000	7 1	987	4
AND	1	8	5,400	2,700	2,700	50	675	2
IBGINIA								1
	44	88	82,615	82,615			892	84
	47	108	51,200	51,200			497	41
•	22	47	28,855	23,855			497	18
AN	20	26	9,660	9,660			872	12
6137	18	25	10,800	10,800			482	6
OTA	1	2	1,200	1,200			600	2
	15	48	17,658	17,658			411	6
x .	10	21	16,650	16,650			798	4
XY	7	14	6,600	6,600			400	7
	1	8	1,620	1,620			540	2
RITIA								1
	1	4	4,000	4,000			1,000	1
KA TERRITORY		••						
AL, Oct. 25, 1865	917	4,100	2,252,545	1,619,038	633,497	281	550	624

OFFICERS.

President.

E. B. BIGELOW								•	•	BOSTON, MASS.
	V	ice=	1 111	esi	ide	nts				
T. S. FAXTON			٠.							UTICA, N.Y.
THEODORE POMEROY										PITTSFIELD, MASS
SAMUEL BANCROFT.										MEDIA, PA.
		T	rea	su	ret.					
WALTER HASTINGS.										BOSTON, MASS.
		ğ	ect	eta	rp.					
JOHN L. HAYES										BOSTON, MASS.
	_									

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Maine.

R. W. Robinson, Dexter. J. H. Burleigh, South Berwick. Thomas S. Lang, N. Vassalboro'.

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D. H. BUFFUM, Great Falls. DANIEL HOLDEN, Concord.

Vermont.

S. WOODWARD, Woodstock. SETH B. HUNT, Bennington.

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JESSE EDDY, Fall River.
S. BLACKINGTON, North Adams.
JOSHUA STETSON, BOSTON.
A. C. RUSSELL, Great Barrington.
G. H. GILBERT, Ware.
C. W. HOLMES, MONSON.

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HOMER BLANCHARD, Hartford. J. CONVERSE, Stafford Springs. B. SEXTON, Warehouse Point. GEORGE KELLOGG, ROCKVIlle. GEORGE ROBERTS, Hartford.

Rhode Island.

S. T. OLNEY, Providence. ROWSE BABCOCK, Westerly.

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New Jersey.

Jonas Livermore, Blackwoodtown. David Oakes, Bloomfield.

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Statistics.

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T. S. FAXTON, Utica, N.Y.
J. J. ROBINSON, Rockville, Ct.

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LIST OF MEMBERS.

	MAI	N E.									
Galen C. Moses				Bath.							
NEWICHAWANOCK Co., J. H.	I. Burleigh	Ag't		So. Berwick.							
DEXTER MILLS. R. W. Robi	inson, Ag't			Dexter.							
8. O. Brown				Dover.							
Anson P. Morrill				Readfield.							
THOMAS S. LANG											
N	NEW HAMPSHIRE.										
J. M. BABCOCK & Co., .				Barnstead.							
B. F. & D. HOLDEN				West Concord.							
ALMON HARRIS											
GREAT-FALLS WOOLLEN CO											
D. HENSHAW WARD, Ag't A											
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	VERM	ONT.									
SETH B. HUNT				Bennington.							
Holmes, Whittenore, &	Co			Springfield.							
BURLINGTON WOOLLEN CO	., J. Stets	on, Treas		Winooski.							
SOLOMON WOODWARD .				Woodstock.							
N	1A88ACH	USETTS.									
8. BLACKINTON				No. Adams.							
S. W. BRAYTON & Co				,, ,,							
Dean & La Monte											
GEORGE L. DAVIS				No. Andover.							
N. Stevens & Sons											
Assabet Manuf's Co., T.											
MILLER'S-RIVER MANUF'G											
C. P. TALBOT & Co				Billerica.							
Estus Lamb				Blackstone.							
R. M. BAILEY											
ERASTUS B. BIGELOW .				"							

GEORGE WILLIAM BOND	ston.
GARDNER BREWER & Co	,,
GARDNER COLBY	••
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REUBEN S. DENNEY	,,
J. WILEY EDMANDS	"
George L. Harwood	,,
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James L. Little	"
Assert Martin	,,
Anarama Manara	,,
Contract Manager	"
Danas e Managara	"
C W D	,,
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JOHN H. STEPHENSON	
AUSTIN SUMNER, Treas. Merch. Woollen Co., Dedham, Mass.	,,
HENRY V. WARD, Treas. Lawrence Manufacturing Co	,,
C. L. HARDING	
FRENCH & WARD	nton.
DAMON, SMITH, & Co	
THOMAS BARROWS De	dham.
DIGHTON WOOLLEN Co., William C. Whitridge, Pres Di	ghton.
JESSE EDDY, & SON Fa	
F. B. RAY	anklin.
ALIAN CAMERON	aniteville.
BERKSHIRE WOOLLEN Co., A. C. Russell, Ag't Gt	. Barrington.
F. W. HINSDALE & BROTHER	nsdale.
F. W. HINSDALE & BROTHER Hi PLUNKETT WOOLLEN Co., C. J. Kittredge, Pres	••
AUGUST STEUSBERG	olyoke.
D. D. CROMBIE La	wrence.
George A. Fuller	••
PACIFIC MILLS, W. C. Chapin, Ag't	**
WASHINGTON MILLS, Joshua Stetson, Treas	,,
ELIZUR SMITH Lo	
BALDWIN Co., P. Anderson, Ag't and Treas Lo	well.
ISAAC FARRINGTON	••
STAR MILLS, George Brayton, Treas	iddleboro'.
S. U. CHURCH & BROTHER	iddlefield.
CRANE & WATERS	illbur y .
M. & S. LAPHAM	,,
NELSON WALLING	,,
HAMPDEN COTTON MANUF'G Co., C. W. Holmes, Ag't . Me	on son.
LOAM SNOW, Pres. Star Mills, Middleboro', Mass Ne	w Bedford.
BURROUGH & BARTLETT No	

W. R. PARKS	. Palmer.
JOHN V RABERD & REATHER	Pittofield
PECK & KILBOURN	Pittafield.
PITTSFIRLD WOOLLEN CO.	
L. Pomeroy's Sons	• ,,
8. N. & C. Russell	•
D. & H. STEARNS	• ",
TACONIC MILLS, George Y. Learned, Treas	• "
SALISBURY MILLS, John Gardner, Treas., Boston	. ,, Saliahuwa
C. Alden	
John L. King	
	• "
C. E. PARSONS	. ,, Sacalabaidan
S. W. Co.	. Stockoriage.
8. W. Scott	. Uxbriage.
GEORGE H. GILBERT & CO	. ware.
CHARLES A. STEVENS	* **
S. H. Sibley	. warren.
L. M. CAPBON & SONS	
RAVINE MANUFACTURING CO	. So. Wilbraham
SCANTIC MANUFACTURING Co., L. E. Sage, Ag't Adriatic Mill, Granville M. Clark, Treas	. ,, ,,
Adriatic Mill, Granville M. Clark, Treas	. Worcester.
H. H. CHAMBERLAIN & Co	, ,,
CURTIS & MURDOCK	• ••
RHODE ISLAND.	
H. SAYLES & SON	Pascoag.
R. G. HAZARD	Peacedale.
ATLANTIC DELAINE Co., George W. Chapin, Treas	Providence.
WILLIAM G. BUDLONG	. ,,
Chapin & Downes	, ,,
TAFT, WEEDEN, & Co	
WAINSKUCK Co., S. T. Olney, Treas	, ,,
Rowse Babcock	Westerly.
Brown & Clark	
Edward Harris	Woonsocket.
CONNECTICUT.	
THOMAS CROSSLEY	Bridgeport.
BROAD-BROOK Co., B. E. Hooker, Treas	
A. C. DUNHAM	Hartford.
HARTFORD CARPET Co., George Roberts, Treas	• •,
HOME WOOLLEN Co., H. Blanchard, Treas	
N. KINGSBURY & Co	,,

THAMES WOOLLEN Co., R. G. Hooper, Ag't	Montville
THOMAS I RWIS	Nangatuck.
THOMAS LEWIS	New Britain
Union Manufacturing Co.	Normalk
UNION MANUFACTURING Co	Norwich
YANTIC MILLS, by E. Winslow Williams	MOI WICH.
AMERICAN MILL, J. J. Robinson, Ag't	n n Dockwille
Francia Mill, J. J. Rootneon, Agt	Nockville.
FLORENCE MILLS, George Kellogg, jr., Ag't	"
J. D. W. HARRIS	• •,
HOCKANUM CO., George Maxwell, Ag't	• "
NEW-ENGLAND CO., Allen Hammona, Agt	• ••
ROCK MANUFACTURING Co., George Kellogg, Ag't	"
Joseph Selden	, ,,
E. H. HYDE	
MINERAL-SPRINGS MANUF'G Co., J. Converse, Treas	
MILL-RIVER WOOLLEN MANUF'G Co., Thos. S. Hall, Pres	
TERRY MANUF'G Co., by Henry K. Terry	
EAST-WINDSOR WOOLLEN Co., B. Sexton, Pres	
GLENVILLE MILLS, A. D. Le Fevre	. Waterbury.
WATERBURY MILLS, John W. Whittal	• ,,
DALEVILLE MILLS, Ed. H. Robinson, Pres	
SEQUASSEN WOOLLEN Co., William W. Billings, Ag't	
P. C. ALLEN	. Windsorville.
Lounsbury, Bissell, & Co	. Winnepauk.
NORWALK MILLS, by Charles C. Betts	• ,,
Daniel Curtis & Co	. Woodbury.
NEW YORK.	
STEAM WOOLLEN Co., S. Harris, Ag't	. Catskill.
C. H. ADAMS	. Cohoes.
C. H. Adams	. ,,
Joseph H. Parsons	. ,,
A. E. STIMSON, Treas	• ,,
	. Ephratah.
GLENHAM Co., William M. Dart, Ag't	. Glenham.
	. Hudson.
SAXONY WOOLLEN CO	. Little Falls.
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CHESTER MOSES & Co	. Marcellus.
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ELIAS TITUS & SONS Poughkeepsie.
H. WATERBURY Renssalaerville.
SCHAGHTICORE WOOLLEN MILLS, Amos Briggs, Pres Schaghticoke.
ISAAC R. BLANVELT Spring Valley.
P. W. HART Stamford.
TROY MANUFACTURING Co., by Azro B. Morgan Troy.
TROY WOOLLEN Co., by James S. Knowlton ,,
JAMES ROY & Co West Troy.
PETER CLOGER, Ag't Utica Steam Woollen Co Utica.
EMPIRE WOOLLEN Co., A. J. Williams ,
T. 8. FAXTON
GLOBE WOOLLEN Co., Robert Middleton, Ag't ,,
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JONAS LIVERMORE
DAVID OAKES & SON
CAMDEN WOOLLEN Co., S. B. Stitt, Treas., Philadelphia . Camden.
S. & R. DUNCAN Newark.
NORFOLK & NEW BRUNSWICK HOSIERY Co New Brunswick.
PENNSYLVANIA.
WALDO & SON Arcade.
JAMES IRVING
FREMONT WOOLLEN Co., by R. Garsed Frankford.
SAMUEL RIDDLE
JOHN COVODE Lockport Stat'n.
A. CAMPBELL & Co
Edward Holt
H. S. HUIDEROPER Meadville.
SAMUEL BANCROFT Media.
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H. N. Bruner ,
S. W. CATTELL, Lincoln Mills ,
CAMPBELL & POLLOCK, Continental Woollen Mill ,
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THE FLEECE AND THE LOOM:

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AN

ADDRESS

BEFORE THE

itional Association of Wool Manufacturers,

AT

THE FIRST ANNUAL MEETING IN PHILADELPHIA,

SEPT. 6, 1865.

BY JOHN L. HAYES,

SECRETARY.

WITH SECRETARY'S REPORT AND TABLES.

BOSTON:

PRESS OF JOHN WILSON AND SONS.

1866.

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ADDRESS.

THE occasion of the first annual meeting of the "National Association of Wool Manufacturers" would seem to demand from your Secretary something more than a meagre statement of transactions of the Association necessarily limited by the brief period since its organization, and has suggested, as the most suitable subject for an address which shall have a wider scope than a mere official report, the consideration of the national importance of the wool manufacture and the means of developing it.

The principal articles of the wealth of a nation are the yearly products of those industries which supply food and clothing, and the instruments by which they are produced and diffused. The distribution of these products constitutes the commerce of the world. Of the four branches of textile industry which clothe mankind, the one to which we are devoted is the most ancient, the most important to the inhabitants of the temperate regions, and, therefore, to the most civilized portions of mankind, and at present the second in commercial importance. We cannot fail to benefit ourselves by impressing upon our own minds even familiar facts and considerations which tend to exalt our industry, and stimulate us to advance and ennoble it; and it is the highest duty to our cause to enlighten the public mind as to the influence which this industry has had and may have in its future possible development, in promoting the wealth of the country and

comfort of the people, in identifying the interests of distant States, in sustaining the public credit, and securing a real national independence.

Among the well-ordered adaptations of nature for the wellbeing of the human race, one of the most beneficent is that which has supplied the temperate regions with an animal fitted to produce at the same time food and the most essential clothing of its inhabitants, and one whose culture is a most valuable accessory to general agriculture. So early did man avail himself of this gift, that we find sheep mentioned in the most ancient writings, in the first chapters of Genesis, in the Persian Zend Avesta, in the Indian Vedas, and in the Chinese Chou-king, and represented on the monuments of Egypt. According to Geoffroy Saint-Hilaire, the highest authority on the origin of species, the specific source of our domestic sheep is unknown. All that is certain is, that the present races originated in the East; the primitive names, Bock and Bouc, found in the most ancient Asiatic languages, being preserved in our term Buck.*

This species is endowed with a plasticity, so to speak, so remarkable, that it is more susceptible of modification than any other animal, except the dog,† so that "the breeder," as Lord Somerville says, "may chalk out upon a wall a form perfect in itself, and then give it existence." ‡ Hence peculiarities are developed in the coverings of different races produced by man, which make that distinctness and variety of fabric which characterize the wool manufacture; and thus we have the coarse Cordova and Donskoi wools for our carpets; the noble electoral wools of Saxony and Silesia for our broadcloths; the strong middle wools of the Southdown and our

[•] Bulletin de la Société Imperiale Zoologique d'Acclimatation, t. 6, p. 502.

[†] Cuvier. Animal Kingdom, translated by H. McMurtrie. New York, 1831. Vol. i. p. 199.

[†] Bischoff on Wool, Woollens, and Sheep. London, 1842. p. 880.

native sheep for blankets; the soft, long, and finer merino wools of France, Vermont, and Michigan, for thibets, delaines, and shawls; the longer and coarser combing wools of the Cotswold and Leicester races for worsteds in their thousand applications; the very long and bright-haired lustre wools of Lincolnshire for alpaca fabrics; and, lastly, the precious silky Mauchamp wool, the recent triumph of French agronomic skill, rivalling even the Cashmere, for shawls, and the Angora, for Utrecht velvets.

The fibre of wool, rendered more perfect than any other by the more complete chemical elaborations and assimilations of the animal economy, has the most highly developed organic structure. While the specific gravity of cotton is 1.47, of linen 1.50, and of silk 1.30, the specific gravity of wool is but 1.26.† It is, therefore, of all fibrous substances the best nonconductor, and its tissues the lightest and warmest and most healthful. The perfection of the fibre is shown in its indestructibleness and durability. Cotton and flax may be ultimately reduced to mere woody fibre. Wool is almost incapable of mechanical destruction. The existence of "shoddy," the term of reproach to the woollen manufacturers, is the strongest proof of the excellence and indestructibility of its original fibre. Unlike silk, the product of an inferior animal organization, which is straight and entirely structureless, the fibre of wool is crisped or spirally curled, and is made up of cells of different kinds, — the interior forming the pith, and the exterior consisting of serrated rings imbricated over each other, having under the microscope the appearance of a series of thimbles with uneven edges inserted into each other; these serratures, as well as the spiral curls, being more or less distinct according to the fineness of the fibre. ‡ We have here the

[•] See note on p. 55.

[†] Ure's Philosophy of Manufactures, p. 81, et seq.

[!] Youatt on Sheep, p. 94. Argument by George Harding in Supreme Court of United States. Burr rs. Duryce et als. "Hat Body Case," p. 118. Report of Flax and Hemp Commission p. 68.

cause of the invaluable quality of felting, to which we owe Flax and cotton composed of our hats and broadcloths. mere woody fibre are opaque and dull in aspect; woolly fibre, when freed from the peculiar soapy oil or yolk which nourishes and protects its growth, has a natural polish which protects it from soiling, and in some varieties gives a positively lustrous beauty to its fabrics; the vegetable fibres receive with difficulty permanent dyes, and sometimes curiously exhibit their refractory nature in contrast with wool. The fibres, accidentally detached from cotton or hempen strings, with which fleeces are sometimes bound, when incorporated with the woollen fabric, refuse the dye, and often ruin whole products of the On the other hand, all animal fibres have ready affinities with the chemical agents of the dyer. Wool especially, from its beautiful whiteness, itself the result of the amelioration of the original black sheep, is unrivalled in its facility for receiving, and power of permanently retaining, color, as in the famous woollen Gobelin tapestries,* where over a thousand distinctly defined tones and hues are given to fabrics destined to be indestructible as works of art.

Such are the qualities of fibre which have led every industrious nation to the culture of flocks as the first necessity of its people; which have caused, in every manufacturing nation, the demand to constantly exceed the supply; which have transplanted colonies from the Cape of Good Hope to Australia, and have carried the shepherd-emigrant to the steppes of Russia and the plains of La Plata; † and which have brought the present production to such enormous figures as are given by recent German estimates, ‡ giving to Great Britain an annual production of 260,000,000 pounds of wool; to Germany,

Chevreiul on Colors. Translated from the French by John Spanton. London, 1858. p. 118.

[†] See Southey on Colonial Wools, passim.

[‡] United-States Economist of June 10, 1865, which quotes from a writer in the Year-book of German Cattle Breeders

200,000,000; France, 123,000,000; Spain, Italy, and Portugal, 119,000,000; European Russia, 125,000,000; making, in all Europe, 827,000,000; in Australia, South America, and South Africa, 157,000,000; the United States, 95,000,000; the British North-American Provinces, 12,000,000; Asia, at a very general estimate, 470,000,000; Northern Africa, 49,000,000: the aggregate production of wool in the whole globe amounting, by these estimates, to 1,610,000,000, or a pound and a quarter to each inhabitant, reckoned at twelve hundred and eighty-five million people.*

In tracing the history of the woollen manufacture, we find that it had already attained considerable perfection with the Romans, who employed this material in almost all their garments,† and with whom sheep were so abundant that a single patrician bequeathed, by will, two hundred thousand to Augustus.‡ The prices of the finer fabrics, however, were enormous.

[•] Bulletin of American Geographical Society, 1865, p. 153. Hon. Fred. A. Conkling, in a paper on the Production and Consumption of Cotton, furnishes a table, prepared by Prof. A. J. Schem, in which the populations of all the countries on the globe using cotton exclusively are set down at 695,596,483. The populations which use cotton only partially (and, consequently, use more or less wool) are set down at 519,556,258.

^{† &}quot;All the garments of both sexes were for many centuries made of wool exclusively; and, although silk and flax were introduced under the empire, they were never adopted by any large portion of the community." — Ramsay's Elementary Manual of Roman Antiquities. London, 1860. p. 238.

[‡] Statistique des Peuples de Antiquité, par M. Moreau de Jonnes, t. ii. p. 464. The invaluable race of merino sheep is probably an inheritance of Roman civilization. The race most prized by the Romans was called the Tarrentine, from Tarrentum, a town settled by a Greek colony. They were also called Greek sheep. Their wool was of exceeding fineness; and they were protected by coverings of skins, and were also carefully housed, and often combed, and bathed with oil and wine. Hence they were very delicate. Columella, the most eminent agricultural writer of the Romans, who lived in the century before the Christian era, relates (De Re Rustica, lib. vii. chap. 2) that his paternal uncle, M. Columella, "a man of keen genius and an illustrious agriculturalist," transported from Cadiz to his farm-lands, which were in Boetica, comprehending a part of the present province of Estramadura, some wild rams of admirable whiteness brought from Africa, and crossed them with the covered or Tarrentine ewes. Their offspring, which had the paternal whiteness, being put to Tarrentine ewes, produced rams with a finer Seece. The progeny of these again retained the softness of the dam and the whiteness of the sire and grandsire (maternam mollitiem, paternum et avitum colorem). Other agricult ralists undoubtedly imitated Columella, and a stronger constitution was thus imparted



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The climate of England is wonderfully fitted for raising certain breeds of sheep, and it is probable that our British ancestors were employed in the domestic production of woollen goods from the earliest period that they had emerged into civi-Names derived from textile occupations must have been early incorporated among English sirnames. rendered so familiar by its quaint calligraphy upon our Treasury notes, and that of New-England's great orator, are inherited from the ancient spinners and websters, or weavers of England. Nevertheless, the English produced only common stuffs, and exported, in the eleventh century, more than half their wools to the Netherlands. In the early part of the fourteenth century, the English are spoken of as "only shepherds and wool merchants," and as "depending on the Netherlands, who were the only wool-weavers in Europe.* In the latter part of the fourteenth century, the manufacture of wool received its first impulse in England, and became firmly transplanted upon her soil by the protecting influence of Edward III., who thus added to his title of hero of Cressy, the prouder name of father of English commerce. The eyes of this enlightened sovereign were opened to one of those simple facts which England now expects to be invisible to all other nations. He saw, in the quaint words of the author of the "Golden Fleece," -" that the subjects of the Duke of Burgundy, receiving the English wool at sixpence a pound, returned it, through the manufacture of that industrious people, in cloths at ten shillings, to the great enriching of that State, both in revenue to their sovereign and employment to their subjects. He at once proposed how to enrich his people, and to people his new conquered dominions; and both these he designed to effect by means of his English commodity, wool." † The first great step

The Pensionary De Witt, quoted by Youatt. Sheep, their Breeds, &c., by William Youatt, p. 205.

[†] Smith's Memoirs of Wool, vol. i. p. 189. Youatt, p. 205.

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For five centuries the system of protection to the woolmanufacturers, inaugurated by Edward III., was continued by the succeeding sovereigns and parliaments of England. abstract of laws relating to the growers of wool and the manufacture thereof, made in 1772, enumerates three hundred and eleven laws,* all tending to one object, - the encouragement of the manufacture. With this object the exportation of wool, after being several times suspended, was definitely prohibited in 1660, and so continued until the year 1825.1 The exportation of fuller's earth was forbidden. The expor tation of sheep was prohibited under the severest penalties; # and even sheep-shearing could not be carried on within five miles of the sea without the presence of a revenue officer. To secure the manufacturers against a monopoly of wool, the number of sheep to be kept by one person was limited to two thousand. One statute required that all black cloth and mourning stuff worn at funerals should be made of British wool alone; another, which was carried into full effect for one hundred and thirty years, or nearly to the present century. ordained that every person should be buried in a shroud composed of woollen cloth alone. The export of woollen cloth from England to any foreign ports was permitted without a duty.** The export of woollen goods from Ireland, or any of the English Plantations in America, was prohibited. †† Upon the application of the London and Canterbury woollen weavers, the wearing of

supply of gold, the annual produce of which has tripled since 1848. The correspondence between the periods of Elizabeth and Victoria is quite remarkable.—The Tariff Question, p. 17.

[•] Bischoff, vol. i. p. 6. See Bigelow's Tariff Question, p. 17

[†] Porter's Progress of the Nation. London, 1851. p. 168.

[‡] Youatt, p. 216.

[§] Bischoff, vol. i. p. 244.

[|] Youatt, p. 216.

[¶] Youatt, p. 224.

^{••} First William and Mary. Bischoff, vol. i. p. 85.

^{††} Tenth and Eleventh William III., chap. 10. Bischoff, vol. i. p. 89.

comfort of the people, in identifying the interests of distant States, in sustaining the public credit, and securing a real national independence.

Among the well-ordered adaptations of nature for the wellbeing of the human race, one of the most beneficent is that which has supplied the temperate regions with an animal fitted to produce at the same time food and the most essential clothing of its inhabitants, and one whose culture is a most valuable accessory to general agriculture. So early did man avail himself of this gift, that we find sheep mentioned in the most ancient writings, in the first chapters of Genesis, in the Persian Zend Avesta, in the Indian Vedas, and in the Chinese Chou-king, and represented on the monuments of Egypt. According to Geoffroy Saint-Hilaire, the highest authority on the origin of species, the specific source of our domestic sheep is unknown. All that is certain is, that the present races originated in the East; the primitive names, Bock and Bouc, found in the most ancient Asiatic languages, being preserved in our term Buck.*

This species is endowed with a plasticity, so to speak, so remarkable, that it is more susceptible of modification than any other animal, except the dog,† so that "the breeder," as Lord Somerville says, "may chalk out upon a wall a form perfect in itself, and then give it existence." ‡ Hence peculiarities are developed in the coverings of different races produced by man, which make that distinctness and variety of fabric which characterize the wool manufacture; and thus we have the coarse Cordova and Donskoi wools for our carpets; the noble electoral wools of Saxony and Silesia for our broadcloths; the strong middle wools of the Southdown and our

[•] Bulletin de la Société Imperiale Zoologique d'Acclimatation, t. 6, p. 502.

[†] Cuvier. Animal Kingdom, translated by H. McMurtrie. New York, 1831. Vol. i. p. 199.

[†] Bischoff on Wool, Woollens, and Sheep. London, 1842. p. 880.

the devotion of England to her manufacturing interests, were the prohibition, for nearly a century and a half, of the exportation of British wool,* and the admission of foreign wool at a merely nominal, or very moderate duty, in spite of the violent reclamations of the landed aristocracy. In a struggle of over a hundred years with the manufacturers, the landed proprietors had but one brief success; where they secured, for four years only—viz., from 1819 to 1824—a tax upon foreign wool of sixpence per pound.† It had become a deep-rooted sentiment of British statesmen of every party, that their highest duty to the State was the encouragement of their own manufactures, and, first of all, those of wool, for so many years their chief export, and peculiarly national staple, - " eminently the foundation." as it was called, "of English riches," ‡ and "the flower and strength, the revenue and blood of England." § The "wool sack," upon which the Lord Chancellor of England has sat for ages as the President of the House of Lords, is a symbolical tradition of the importance which the nation has always attached to the woollen industry. | It was declared by statute that "wool and woollen manufactures, cloth, serge, baize, kerseys, and other stuffs, made or mixed with wool, are the greatest and

[&]quot;The one sole reason why England obtained the mastery of the ocean, and command of the world's business, is that she exported no raw material; and the reason why the Southern States went into ruin by the route of rebellion is because they exported nothing else."—The Western States; their Pursuits and Policy, by Dr. William Elder, p. 20.

[†] In 1802, a duty of 5s. 3d. sterling per cwt. was laid upon foreign wool. This was gradually raised till it reached 6s. 8d. per cwt. In 1819, the ministers wanted to raise 1,400L by a tax on malt; and the landed aristocracy refused their assent unless a tax was laid on wool, and the tax of sixpence a pound was imposed, the bill having been hurried through Parliament before the manufacturers could be heard. Bischoff, vol. i. p. 452.

[‡] Sir Josiah Childs. Smith's Memoirs, vol. i. p. 157.

⁵ Golden Fleece. 1656. Smith's Memoirs, vol. i. p. 189.

[&]quot;The antiquitie of wool within this kingdom hath been beyond the memorie of man, so highly respected for those many Benefits therein that a customable use has always been observed to make it the seat of our wise learned judges in the sight of our noble Peers (in the Parliament House) to imprint the memorie of this worthy Commoditie within the minds of those firm supporters and chief rulers of the land."—John May, 1613. Smith's Memoirs, vol. i. p. 91.

cause of the invaluable quality of felting, to which we owe our hats and broadcloths. Flax and cotton composed of mere woody fibre are opaque and dull in aspect; woolly fibre, when freed from the peculiar soapy oil or yolk which nourishes and protects its growth, has a natural polish which protects it from soiling, and in some varieties gives a positively lustrous beauty to its fabrics; the vegetable fibres receive with difficulty permanent dyes, and sometimes curiously exhibit their refractory nature in contrast with wool. The fibres, accidentally detached from cotton or hempen strings, with which fleeces are sometimes bound, when incorporated with the woollen fabric, refuse the dye, and often ruin whole products of the On the other hand, all animal fibres have ready affinities with the chemical agents of the dyer. Wool especially. from its beautiful whiteness, itself the result of the amelioration of the original black sheep, is unrivalled in its facility for receiving, and power of permanently retaining, color, as in the famous woollen Gobelin tapestries,* where over a thousand distinctly defined tones and hues are given to fabrics destined to be indestructible as works of art.

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Chevreiul on Colors. Translated from the French by John Spanton. London, 1858. p. 118.

[†] See Southey on Colonial Wools, passim.

[‡] United-States Economist of June 10, 1865, which quotes from a writer in the Year-book of German Cattle Breeders

ern times, overshadowed by its own offspring, the cotton manufacture, and still surpasses that of all other nations in the quantity and value of its fabrics.

"The rapid growth and prodigious magnitude of the cotton manufacture of Great Britain," for a century has not elapsed since its infancy, have been called "the most remarkable phenomena in the history of industry." But it should be remembered that this industry was the natural offshoot from the woollen manufacture. Through the protection of four centuries afforded to the woollen trade mainly, and in a less degree, only because they were less important, to the linen and silk trades, England had become a nation of spinners and weavers, or of artisans subsidiary to them. The textile crafts had become, by hereditary transmission, as fixed as in the castes of India. The skill and taste for textile industry was already developed for application to a kindred fibre. Some of the first and most important inventions which have produced the wonderful results of the cotton manufacture, sprang directly from that of woollens. To instance one only; John Kay, residing in Colchester, where the woollen manufacture was then carried on, devised the fly-shuttle, by which double the quantity of cloth, and of a better quality, could be produced by each workman, and with less labor. The Yorkshire clothiers were the first to adopt his improvements, which form a part of every power-loom of the millions of silk, cotton, linen, and woollenlooms in all parts of the world.† The commerce and capital which supplied the raw material from abroad for the rising manufacture had grown up from the woollen trade principally; but it had exerted a more important influence in making capitalists familiar with the direct and incidental profits of manufacturing industry, and in assuring them that the favor of government, which had been extended for centuries to one,

[•] McCulloch's Commercial Dictionary, article Cotton.

[†] Brief Biographies of Inventors of Machines, by Bennett Woodcroft, p. 8.

would never be wanting for a kindred interest. Hence capital flowed by a natural transition into the new channel, and invention found a fresh field for its creative skill under the patent system which England had inaugurated as a part of her protective policy. The subject which I have proposed for this address,—the national influence of our own peculiar manufacture,—finds its most brilliant example in the history of English industry, which no less illustrates the more important truth, that any industry, thoroughly incorporated in the national existence, will have new offshoots and unexpected developments, and may enrich a nation even more than by its own fruits, in opening fresh sources of productive power.

Towards the close of the last century the woollen manufacture received in its turn the inventions first applied to cotton-They were, first of all, the great discovery of Watt, which furnished a motive-power everywhere applicable; the roller-spinning of Paul, adopted by Arkwright, which furnished an automatic mechanism, instead of muscular force, which drew and twisted the fibre in a continuous thread; the jenny of Hargreaves, which drew at once from ten to sixty or seventy threads; the mule of Crompton, which increased the power of the spinner a hundred fold; and the power-loom of Cartwright, which quadrupled the power of the weaver.* All these inventions, and what was equally important, the factory system of Arkwright, were applied, upon a large scale, to the woollen manufacture, first by Mr. Gott, who added the gig-mill for raising the wool on the cloth, and shearing-frames worked also by power. These improvements gave a vast extension to the manufacture. The use of woollen tissues increased with the low price of production, which continued to advance with accelerated progress. At the end of the eighteenth century Great Britain already consumed in her fabrics ninety-four millions of pounds of her own wool, and eight millions imported.

^{*} Woodcroft, p. 8, et seq.

In 1828, the number of sheep in Great Britain had increased one-fifth, and the average weight of the fleeces in equal proportion. Mr. Bernoville, in his admirable work on the "Industry of Combed Wools," published in the report made to the French government on the labors of the French Commission, at the Universal Exposition of 1851, estimates the number of pounds of wool in Great Britain in 1851 at two hundred and eight million pounds, so that the production doubled in fifty years. This increase of production was caused partly by the increase of the number of sheep, but principally by the increase in the weight of fleeces. Within that period a genuine transformation has taken place in the English races. attain the utmost possible weight of mutton, sheep are fed to their utmost capacity, and the increase of flesh is accompanied by a corresponding increase of wool, which, losing in fineness, has gained in strength, length, and brilliancy. domestic production has made such extraordinary progress, the importation has increased with equal rapidity. The eight million pounds in 1801 have risen successively from sixteen million pounds in 1821 to fifty-six millions in 1841, to eightythree millions in 1851, having increased tenfold in fifty years. In 1859, the importation had reached one hundred and thirtythree millions.†

There are no official statements of the amount or value of the whole production of British manufactures, or of the population employed in them; we must, therefore, rely upon the very general estimates of the best authorities, which, however, differ so widely that we can merely approximate the totals of production in the woollen manufacture. Mr. Bernoville, in the work above quoted, estimating the mean value of the domestic production of wool in Great Britain at one franc twenty cen-

† Bigelow's Tariff Question, Appendix, p. 198.

[•] Porter's Progress of the Nation. London, 1851. p. 168. Industrie des Laines peignées, par M. Bernoville, p. 11. Travaux de la Commission Française, vol. iv.

times the pound, and the imported wool at one franc seventy centimes, places the whole value of wool employed by British industry at 370,000,000 francs, or \$74,000,000. He estimates that the value of this wool is increased once and a half times by the manufacture, and that the annual production of woollen fabrics in 1851 was 925,000,000 francs, or \$185,000,000, and the domestic consumption 679,000,000 francs, or \$135,000,000. Mr. Redgrave, one of her Majesty's Inspectors of Factories, estimates the value of the British woollen and worsted manufactures in 1856 at \$183,492,725, and the domestic consumption in Great Britain, \$111,366,160, for each person of its population at \$4.25.* Mr. Simmonds, the editor of Ure's "History of the Cotton Manufacture," estimates the total production of woollen goods in 1860 at \$160,000,000, and the domestic consumption at one-half that amount. This estimate appears too small, and that of Mr. Redgrave seems most reli-Judging from the progress of exports, sixty millions of dollars in 1856, and eighty millions in 1860, the value of the woollen manufactures in the United Kingdom cannot be short of \$200,000,000. The number of persons employed in the woollen industry, in all its ramifications, was estimated in 1841 at 245,000 persons. This number must have vastly increased in twenty years. Mr. Bernoville estimates them at 400,000 in 1851. Statistics have been procured, from time to time, by the inspectors of factories in reference to establishments under their supervision. They give the number employed in the wool manufacture in 1856, at 79,091; and in the worsted manufacture at 87,794; a total of 166,885. The number employed in 1835 is stated at only 71,274. The number had more than doubled in twenty years, although the progressive employment of mechanical means has had a tendency to diminish the number of hands: Precise data are given only in

Bigelow's Tariff Question. Appendix, p. 199.

relation to establishments subject to the provisions of the Factory Acts, which make the whole number employed in all the textile manufactures only 682,497. Mr. Redgrave estimates that there are 887,369 persons employed in textile fabrics, not subject to the provisions of the Factory Acts, which two classes have dependent upon them at least 3,000,000 unemployed persons, representing a total of 4,568,082 persons. employed in the woollen and worsted manufactures constitute very nearly a quarter of the whole number enumerated under the provisions of the Factory Acts, which would give to the woollen manufactures a population, depending upon them, of over one million. This immense progress in the manufacture of wool has been due principally to the advance in the manufacture of combing wools or worsted, which now employ directly a larger number than fabrics of carded wool. This progress is best illustrated by the rapid increase of population around the manufacturing centres of the worsted trade. In the West Riding, where there was only a population of 593,000 inhabitants in 1801, it had risen, in 1841, to 1,154,000; it had increased at Halifax from 63,000 to 130,000; at Huddersfield from 14,000 to 38,000; at Leeds from 53,000 to 152,000. It is still more remarkable at Bradford, the great centre of the worsted trade. At the commencement of this century, when this town had a population of only 13,000 souls, all the wool was spun and woven in private houses of the workmen. In 1821, Bradford had doubled the number of its inhabitants, which were 26,000. By the introduction of power-looms in 1834, and afterwards the use of cotton warps in woollen fabrics, and the employment of alpaca and Angora goat's wool, the manufacturing industry was so developed that it sustained in 1851 a population of 103,000, an increase of ninety thousand in half a century. Such an increase in this country would

[•] Bernoville's Industrie des Laines peignées, p. 22. James's History of Worsted Manufacture, p. 611, et. seq.

appear by no means remarkable; but in England, where the question has been for centuries, how to employ the present population of each year, the increase is truly marvellous.

One of the most interesting questions in the study of the philosophy of manufactures is their influence upon the comfort of mankind in diminishing the cost of production. The amounts and values of British exports are instructive upon this question.

One of the largest exportations of woollen tissues from England occurred in the year 1815, after relations had been established with this country, which had been interrupted by the war. It amounted to £9,381,000 in value, and 1,482,000 pieces, and twelve millions of yards. In 1851, it amounted to 2,637,000 pieces, and sixty-nine million yards. The number of pieces, comprising cloths, damasks, and stuffs in general, had almost doubled; and the number of yards, consisting principally of articles of wool and cotton, had more than quintupled. Yet the total value in 1851 was only £9,856,000, exceeding the exportation of 1815 about half a million. The increase of cheapness consisted principally in fabrics of wool combined with cotton.*

This progress in the cheapness of production has continued since 1851. It is estimated in the report of the International Exhibition of 1862,† from well authenticated data, that although there was a clear and established advance of twenty-five to twenty-eight per cent in the cost of wool between the prices of 1851 and 1862, the manufacturers had cheapened the prices of goods between the two periods from seven and a half to ten per cent, the quality and weight being the same. It is, perhaps, unnecessary to say that this increased cheapness of production is no peculiarity of English manufactures. The facts here mentioned illustrate a result which is sure to follow

Bernoville, p. 18.

[†] International Exhibition of 1862. Report of Juries, Class 21.

from any well established manufacturing industry. An increased cheapness of production in England has been effected by two other causes, one of which certainly will be regarded by consumers with less favor. The first is, the use of cotton warps, which are used as a vehicle to extend the surface of wool to such a degree that millions of pounds of cotton are, as it were, plated with this material. Vast establishments in Lancashire are employed solely in making cotton warps, to be woven with wool into what are called union fabrics.* The second is, the combination of shoddy with wool. Twenty-five years ago, woollen rags were worth about £4 per ton, and were used only for manure. They are now worth, in England, £40 per ton, to be converted again into cloth. It is estimated that, in the neighborhood of Leeds, 7,000,000 to 8,000,000 yards of cloth, of the value of \$15,000,000, are annually manufactured from this material; and, that if the supply of shoddy were stopped, it would close one-third of the woollen mills in the United Kingdom, and bring distress upon the West Riding, in Yorkshire, as great as that lately suffered in Lancashire from the want of cotton. It is disclosed in the report on the London Exhibition of 1862, that sixty-five million pounds of shoddy are annually consumed in England, a greater quantity than the whole wool product in the United States, estimated at 60,264,913 pounds by the census of 1860! It is one of the advantages of depending upon foreign importation for our goods, that we are in blissful ignorance of their

[•] Mr. Anderson, a gentleman of much experience in English wool, stated before an agricultural club in England, that a single hogget fleece weighing twenty pounds, with a length of staple of about seventeen inches, "when used in manufacture to its utmost extent, as an admixture with cotton to fabricate the finest alpaca fabrics, would suffice to make upwards of twelve pieces, each forty-two yards in length, and very possibly might be extended to sixteen pieces, or six hundred and seventy-two yards." — Ohio Agricultural Report, 1868, p. 224.

I would, in this connection, invite attention to the most valuable and admirable papers and communications on sheep, husbandry and wool, furnished for these reports by Mr. Klippart, Secretary of the Ohio State Board of Agriculture.

[†] Eighth Census of the United States, vol. Agriculture, p. 86.

origin, and are not shocked with the consciousness of being clad in the cast-off habiliments of a Polish Jew or an Italian beggar.

I will close this sketch by some general remarks upon the character of the British industry in woollens. The whole energies of British manufacturers are directed to supply the masses with goods of the utmost cheapness. They do not seek so much excellence in the fabrics as marketable products. It was remarked by continental observers, at the two great expositions, that although fabrics of wonderful perfection were exhibited, they were not specimens of the ordinary work of their spindles and looms. The colors of their goods are excellent, much better than their designs; but, above all, they surpass in the art of dressing their fabrics so as to conceal their defects and make them attractive to purchasers. Their inventive capacity is shown, particularly in the application to new uses of the vast variety of raw materials which their extensive commerce supplies, but, more than all, in mechanical improvements for substituting the iron frame for the human hand. The breaking up of existing machinery and the replacing of new is the marked feature in the present era of British manufactures. The abundance and cheapness of capital, cheap food under the change in the corn laws, the free admission of raw materials, a well founded confidence in friendly legislation, and the establishment of mercantile houses in all parts of the world, sustain England in the war which she is waging unceasingly against the manufacturing industry of all other nations; and would render a strife against her utterly hopeless, without the barriers of countervailing duties which the instinct of selfpreservation has placed around all other industrious nations.

The history of the woollen industry of France, the second in the amount of its productions, and the first in the general excellence of its products, exhibits the important part which this industry performs in developing the national prosperity, and how it may flourish or decay under the favorable or adverse policies of governments.

This industry received its first impulse in France, near the close of the sixteenth century, from the celebrated edict of Nantes, which restored to that country the Protestants, who had become the most enlightened merchants and skilful workmen in Europe. They brought from Germany, and the Low Countries where they had wandered, the arts of spinning, weaving, and dyeing woollens, and founded the first establishments for making woollen cloths. The infant manufactures, slightly advanced by the agricultural improvements of Sully, who introduced some important breeds of sheep, and, languishing under the inauspicious administration of Richelieu, were finally planted in their present flourishing seats by Colbert, the illustrious minister of Louis XIV. Under his administration, the manufactures of new products created by the arts of Italy, Holland, and Germany, were attracted to the French soil by seductive offers made to foreign artisans. The woollen manufacture received his special attention. He obtained, from Louis XIV., the disposal of fifty thousand livres to be distributed in encouraging this industry. At this period, Holland alone had attained any perfection in the manufacture of fine cloths. Colbert attracted Gosse Van Robais from Holland, by enormous concessions, to fabricate — as his patent, signed by the King, declared - fine cloths, after the fashion of Spain and Holland. Of this act Thiers says, - "When Louis XIV. struck down the Spanish power, Colbert, at his side, executed conquests more important, by introducing the manufacture of cloths into France." * Not content with naturalizing foreign skill, he imposed heavy duties upon foreign manufactures, and attempted the amelioration of flocks by imported breeds; and it is admitted that France owes to his wise acts and counsels

[•] Industrie des Laines fouleés, par M. J. Randoing, p. 88.

the most important developments of her industry. It is with great justice, then, that our own great political economist, whose works, translated into five languages, have been adopted as text-books in the universities of the continent of Europe, has selected the name of the French financier to designate that school of statesmanship which aims to develop, by protection and encouragement, the industrial wealth of a nation.

The woollen interest became again depressed under Louis XV., in whose reign those arts alone flourished which administered to pleasure and luxury. The manufacture revived under Louis XVI., in whose reign merino sheep were naturalized in France, to be again struck down by a fatal error of administration. In 1786, a treaty was concluded between France and England, which admitted into the latter country French productions of luxury and taste, in exchange for an analogous concession for the admission to France of English goods of apparently small price, but which, suiting all classes, are the essential bases of the industry of a people. This treaty was the most fatal blow that the textile manufactures had ever received. England, favored as we have seen by continued protection, had already made great progress in the capacity of manufacturing at comparatively low prices. Before the lapse of the second year from this treaty, France was so flooded by English importations of cloth that she ceased to attempt even to supply her own consumption. Although the policy of 1786 was speedily retraced, and protection restored, the French manufactures had not recovered from the shock when the revolution completed the prostration of all industry.

[•] See the Works of Mr. H. C. Carey, passim.

[†] Smith, in his Memoirs, speaks thus instructively of this great statesman: "Monsieur Colbert, erecting manufactures of wool in all parts of France, and prohibiting all the English woollen manufactures to be imported among them, in a few years set the poor to work throughout that kingdom; . . . the first consequence of which was, that the King of France saw all his subjects clothed, however indifferently, with the manufactures of their own country, who, but a few years before, bought all their clothes from England. — Vol. ii. p. 290.

[‡] Randoing, Industrie des Laines foulcés, p. 21. Manual of Social Science, by H. C. Carey, p. 209.

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No sooner had the first Consul, Bonaparte, grasped, with a firm hand, the reins of State, than he resolved to develop upon the French soil all the elements of wealth concealed within its He wished to appropriate for France all sciences, arts, and industries. Made a member of the Institute, he uttered this noble sentiment: - "The true power of the French Republic should consist, above all, in its not allowing a single new idea to exist which it does not make its own." To learn the necessities and resources of the nation, he called upon savans, painters, and artisans, to adorn with their productions the vast hall of the ancient Louvre. From this epoch a new career was opened to the industry of France, which found its most magnificent protector in the chief of the State. Napoleon said: -"Spain has twenty-five millions of merinos; I wish France to have a hundred millions."† To effect this, among other administrative aids, he established sixty additional sheepfolds to those of Rambouillet, where agriculturalists could obtain the use of Spanish rams without expense. By the continental blockade, he closed France and the greater part of Europe against English importations; and the manufacturers of France were pushed to their utmost to supply, not only their domestic, but European consumption. They had to replace, by imitating them, the English commodities to which the people had been so long accustomed. The old routines of manufacturing were abandoned, and the reign of the Emperor became, in all the industrial arts, one long series of discoveries and progress. Napoleon saw that the conquest of the industry of England was no less important than the destruction of its fleets and armies. He appealed to patriotism, as well as science and the arts, to aid him in his strife with the modern Carthage. the establishment for printing calicoes of the celebrated Oberhampf, Napoleon said to him, as he saw the perfection of

Bulletin de la Société Imperiale Zoologique d'Acclimatation, 2d Serie, t. i. p. 665.
 † Bernoville, p. 133.

the fabrics, — Nous faisons tous deux la guerre à l'Angleterre, mais je crois que le meilleure est encore la votre— "We are both of us carrying on a war with England; but I think that yours, after all, is the best." "These words," says M. Randoing, "so flattering and so just, were repeated from one end of France to the other; they so inflamed the imaginations of the people, that the meanest artisan, believing himself called upon to be the auxiliary of the great man, had but one thought, the ruin of England." *

The fabrications of cloths attained such high perfection during this period, that since then the only progress has been the modification of details. During this period the chemical arts of dyeing attained the excellence so characteristic of French colors; and, during this period, the mechanical genius of Jaquard, aided by the practical skill of Depouilly, produced the loom which has been justly regarded as the greatest invention in the art of weaving of the present century, and has only been eclipsed by the great achievement of our own inventor, who made the Jaquard loom automatic.† The profits acquired by successful manufacturers, during this period of prosperity, were immediately applied to the erection of vast factories, and Mulhouse, St. Quentin, Tarare, and Roubaix, at present renowned seats of the woollen manufacture, received the elements of progress and wealth which they have not since ceased to develop. Of all the conquests of Napoleon, the greatest by far, the industrial independence of France, is still secure. And the assaults of British free trade are still unavailing against

[•] Randoing, p. 11.

[†] For an account of Mr. Bigelow's great invention, see Preliminary Report of Commissioner of Patents, 1868. The report says, "It now presents a machine which is admitted to be unsurpassed by any thing which the mechanical genius of man has ever devised." p. 11.

^{† &}quot;Protection, the industrial creation of Napoleon, the most precious and principal cause of his conquests." Industrie des cotons, par M. Mimirel, President du Council General des Manufactures de France, etc. p. 5.

the bulwarks of protection established through his maxims and example.

Thanks to the immortal founder of the industrial glory of France, she has never been hoodwinked by the specious philosophy of British free trade. She saw, when Mr. Huskisson suppressed the prohibitory duty upon French silk, that it was only because he could not suppress the contraband trade, and because the duty of twenty-five per cent was a more efficient protection of British silks. "When the British Parliament applaud the absolute enfranchisement of commerce," says Baron Dupin, in 1852, "they clap their hands, and these hands are covered with English gloves, whose inferiority is protected against foreign gloves by a duty of twenty-five per cent." Whenever a new manufacture, not provided for in the tariff regulations, has been attempted, the French have seen it crushed by British capitalists, who had been instructed by Mr. Brougham, that "England could afford to incur some loss on the export of English goods, for the purpose of destroying foreign manufactures in their cradle." † "Three times," says Dr. Sacc, "since the commencement of the present century, bave attempts been made in France to spin the wool of the Angora goat. Each attempt has failed; for, as soon as the products appeared in the market, the English spinners lowered the prices from twenty to twenty-five per cent, and rendered competition impossible."

The Anglo-French Treaty of 1860, although often referred to as evincing a change in the protective policy of France, still carefully guarded her manufactures. The Leeds Chamber of Commerce, the highest authority in relation to woollens, regarded the duties under that treaty as prohibitory. Lord Grey asserted, without contradiction, in the

Tableau Statistique des Industries, Françaises du coton, de laine et de la soie, par Baron Charles Dupin, p. 9. Travaux de la Commission Française, t. iv.

[†] Report of the Commissioner of Patents for the year 1861. Agriculture, p. 17.

[‡] Bulletin de la Société Imperiale Zoologique, &c., t. v. p. 579.

ver uses about eighty kilogrammes of spun wool. The 9,600,-000 kilogrammes give employment to 120,000 looms, which gives the number of 300,000 workmen employed in weaving. It is estimated that in dyeing, bleaching, printing, and selling, 20,000 more persons are employed. Estimating the average pay of each of the 320,000 workmen, exclusive of the spinners, at 1 franc 25 centimes a day for three hundred days' work, and adding the salary included in the spinning, Mr. Bernoville arrives at the sum of 146,000,000 francs distributed among 371,000 men, women, and children, which would allow 393 francs 55 centimes, or \$78.70 to each person. estimates furnish data by which we may arrive at a general estimate of the number employed in all the branches of the woollen manufacture. The value of the fabrication of combing wool was 280,000,000 only of her 921,000,000, the estimated value of the whole fabrication; leaving a value of 641,000,000 in other branches. These branches, by the rates established in the estimates above given, would employ 849,000 persons, making nearly a million and a quarter as the number of persons directly employed in the woollen manufactures of France.

In studying the characteristics of the French manufacturers, and the part they have taken in advancing the general progress of the woollen industry, and in adding to the means of consumption, we observe that they have not attained that economy of production which so eminently distinguishes the British manufacturers. Supplied with abundant labor, supported by cheap sustenance, the French manufacturers have been content to remain far behind the British and Americans in the substitution of machinery for human labor. But the tendency of machinery, as they think, is to give mediocrity to manufactured products; and the French aim at the utmost excellence in their works. The individual skill or handicraft of the workman is developed to the utmost extent. All ma-

chinery is rejected which will not surpass the manipulations of the hand. Spinning, the foundation of good textures, is carried by them to the utmost perfection. Yarns, spun from combed or carded wool by the rival nations, exhibited at the great London exposition, were carried ten, twenty, and even thirty numbers higher by French spinners with the same wool.* They excel equally in ameliorating raw materials, in making them softer and more flexible. The French, in the textile arts, are creators; while the English are exploiteurs. The one nation invents new fabrics, new combinations of old materials, new styles and patterns, or what, in a word, are called French novelties. The other works up these ideas, copies, transforms, dilutes, and, above all, cheapens. other nations follow the English example, and our own is as yet no exception. To specify the contributions of inventive or creative genius of France to the woollen industry, we must class, first among the machines, the Jaquard, already referred to, whose wonderful products are seen in all figured textures; and next, the machinery for combing wool and also cotton, of Heilman, of Mulhouse, an invention which possesses interest, not only on account of its vast importance, but the circumstances of its origin. The most novel and valuable part of this machine, as stated by the inventor, which he had long unsuccessfully endeavored to obtain, was ultimately accomplished by carrying into mechanical operation a suggestion which occurred to him whilst watching his daughters combing their hair. He was at that time meditating on the hard fate of inventors generally, and the misfortunes which befell their families. This circumstance, says Mr. Woodcroft, being communicated to Mr. Elmore, of the Royal Academy, was embodied by him in a picture which was exhibited, and greatly admired, at the Royal Academy in 1862.† We all practise or

Bernoville.

[†] Brief Biographies of Inventors, &c., p. 45.

use French creations without suspecting their origin. Before 1834 the colors of all fulled cloths were uniform. At that time Mr. Bonjean, of Sedan, conceived the idea, to give beauty to the productions of his looms, of uniting in the same stuff different tints and figures. His thought was that the domain of production would be as illimitable as that of fantasy, which was the name given to his goods. He was the originator of the product and name of fancy cassimeres, by far the most important branch of our own cloth manufacture. The French, already skilled in making light gauzes of silk, first made bareges in 1818; † a fabric with a west of wool and warp of The English imitated the fabric by substituting cotton for silk in the warp. In 1826, Mr. Jourdain first produced, at the establishment of Troixvilles, that invaluable fabric, mousseline de laine, made of fine wool, for printing. ‡ In 1831, the manufacture and printing of this tissue was fully developed. In 1838, he also created challis, made of a warp of silk organzin and a west of fine wool. § In 1833, first appeared at Paris, simultaneously introduced by three French houses, that fabric so appropriate for the consumption of the masses, the mousseline de laine, with cotton warps. The English adopted the manufacture in 1834-5, and it prevails in every manufacturing This fabric, which is unquestionably a French idea, has been an inestimable blessing. Its products are counted by millions of pieces, and it enables the most humble female to clothe herself more comfortably and becomingly, and as cheaply, with wool, as she could thirty years ago with cotton. In 1858, plain baréges were introduced, for printing. before been made of colored threads; at the same time, balsorine, having the effect of alternate fabrics of cloth and gauze, was created in wool in imitation of a flaxen fabric.

^{*} Randoing. Industrie des Laines foulées, p. 28.

[†] Bernoville, p. 179.

[§] Bernoville, p. 186.

[¶] Bernoville, p. 188.

[†] Bernoville, p. 186.

Bernoville, p. 187.

foulards, with a warp of silk and weft of English combing, were introduced about this time at St. Denis. The fabric, however, most appreciated by female taste, and the most unrivalled of modern woollen textures, and the only one not degraded by imitation, is that beautiful material which derives its name from the fleece of which it is made, the French merino. This tissue was first made at Rheims, in 1801, by a workman named Dauphinot Pallotan. The invention, for which a patent was asked, whether successfully or not is not known, consisted solely in the adaptation of a peculiar type of wool, and not in the fabric. I shall refer to this fabric in another connection, to show that the intelligent skill of the agriculturalist is no less important than the genius of the artisan in developing the manufacturing prosperity of a nation.

The creative genius of the French is more conspicuous in their arts of design and color, as applied to all textile There is an unlimited application of these arts and a boundless field for novelties, in the modern use of printed woollen goods. All the manufacturers of France, in producing new styles of fabric or figure, nourish their tastes by Parisian ideas, the inheritance of the ancient splendors of Versailles. Says Mr. Bernoville: "At Paris, each consumer is a judge, and becomes a guide to the merchant and manufacturer. The Parisians appreciate only what is good, and consecrate only what is beautiful. The grisette as well as the grande dame, the artisan as well as the dandy, has received, and practises, without knowing it, the traditions of art." 1 Although important commercial houses are now established for the sale of designs elaborated in this school, there is no manufacturer in Europe who scruples to copy French pat-We have even so framed our patent laws that, while protecting all other foreign works of invention, we might appro-

Bernoville, p. 185.

[†] Bernoville, p. 195.

[†] Bernoville, p. 175.

priate with impunity the productions of the Parisian pencil and pallet.

Thus, by importation as well as imitation, all over the world, the true lovers of the beautiful, as well as "the sophists, economists, and calculators," whose advent, upon the fall of Maria Antoinette, is so pathetically lamented by Burke, acknowledge France, so gracefully symbolized by Eugénie, the empress of taste and fashion.

I shall not attempt to review the woollen industries of the other manufacturing countries of Europe, and will confine myself to a brief notice of four other nations, the most distinguished for their resistance to the commercial policy of England. In the reports of the Bradford Chamber of Commerce for 1864-5, kindly sent me by our consul at Sheffield, Mr. Abbott, who has charge also of the vice-consulates of Bradford, Leeds, and Huddersfield, I find bitter complaints of the tariff regulations of Austria, Sweden, Spain, and Russia, as affecting, most injuriously, the woollen trade of Bradford. The Austrian tariff is spoken of as presenting "features of the most objectionable character," while "the duties are almost prohibitory, and unjust to England." The Swedish tariff is referred to as having "the unfortunate distinction of disputing with Spain the debatable honor of being the highest in the world, the Russian alone excepted." Of Russia, it is said, "the importation of manufactured tissues is practically prevented by a scale of duties higher than any in the world;" and that the value of only £46,258 of British woollens and worsteds were exported to that country in 1862. It is a matter of no little interest to us to know the manufacturing condition of the nations which have made such declarations of independence.

^{• &}quot;But the age of chivalry is gone; that of sophisters, economists, and calculators have succeeded, and the glory of Europe is extinguished forever." — Reflections on the Revolution in France. London, 1791, p. 60.

Austria consumes about 70,000,000 pounds of wool per year, and its annual production of woollen fabrics amounts to about \$50,000,000 per year. It supplies its own population, and exports to the Levant, Asia, the United States, and even China. Its manufactures of woollens were stimulated, first, by almost absolute prohibition, and have been since encouraged by duties highly prohibitory. What is the condition of the manufacture thus aided by the national favor? Let the disinterested testimony of an English expert answer. The reporter on the class of woollens, in the London Exhibition of 1862, says: "There is no inland country in Europe which has made so much progress in woollen manufactures during the last ten or twelve years as Austria. It has not only maintained and improved its reputation for fine plain woollens, doeskins, heavy coatings, &c., but has made wonderful advances in fancy trouserings. They are no longer imitations of French, English, or other designs, but display an originality highly creditable to the manufacturer. Their woollen dyeing is the best in the whole exposition. The whites, scarlets, oranges, and other shades, possess a clearness, richness, and fulness of color, not attained by any other country."

Sweden, although enjoying few advantages of soil, climate, and position, owes to the policy which the Bradford merchant calls "a debatable honor," her present honorable place in the community of nations. Her population has steadily advanced. Her importation of foreign luxuries of food has greatly increased. Her agriculture has been developed. In the ten years ending in 1787, her importation of grain had been 196,000,000 pounds. In the decade ending in 1853, it was but 34,000,000, while the population had almost doubled. Lands have increased in value, property is divided, a taste for literature is extending, and the people have secured political representation. In the short space of thirteen years the iron manufacture had nearly doubled. The manufacture of woollens in

^{*} Carey, Manual of Social Science, p. 246.

the large establishments has been so successful that it is said that "the worsted and mixed fabrics are such exact imitations of Bradford goods that the most acute judges can scarcely distinguish the difference." The manufacture of woollen cloth is found everywhere throughout the country in the houses of the people. Compare the condition of the people of Sweden, under their system of industrial independence, with that of the population of Ireland, or of Turkey, where men, compelled to abandon weaving and spinning and gathering mulberry leaves and feeding silk worms, can earn but five cents a day,* to which condition the policy of the Bradford merchant would reduce them. "The people of Sweden," says a traveller quoted by Mr. Carey, "seem to unite, on a small scale, all the advantages of a manufacturing and agricultural population more fully than in any district I have ever seen. the farm business, while the women drive a not less profitable branch of industry. There is full employment, at the loom or in spinning, for the old and young of the female sex. vants are no burden. About the houses there is all the neatness of a thriving manufacturing, and the abundance of an agricultural population. The table-linen, laid down even for your glass of milk and piece of bread, is always clean; the beds and sheet's are always nice and white. Everybody is well clad, for their manufacturing, like their farming, is for their own use first, and the surplus only as a secondary object, for sale; and from the number of little nick-nacks in their households, the good tables and chairs, window-curtains and blinds (which no hut is without), clocks, fine bedding, papered rooms, and a few books, it is evident that they lay out their winnings on their own comfort, and that these are not on a low scale of social well-being."

Spain, which also enjoys "the unfortunate distinction" of pro-

[•] Report of the Commissioner of Patents for 1861: Agriculture, p. 12.

tecting her industry, was driven to this policy by seeing, under her colonial system, her home industry abandoned, her artisans and farmers dying out, her towns and cities decaying, and her lands monopolized by the nobles and the church. Fortunately she lost her colonies, and was compelled to look at home. Her agriculture, manufactures, and commerce, have doubled in the last twenty-five years. Provided with that wonderful breed of sheep which has been the great ameliorator of most of the flocks in the world, and which, according to the statement of Her Catholic Majesty's Secretary of State in 1854, still survives in its original perfection, Spain has made remarkable progress in her woollen manufactures, and will not be likely to abandon the system which sustains them when even English judges say of them as follows: "Upon the whole, it is evident that Spain now possesses manufacturers of great enterprise, artisans of first-rate skill, and machinery of the best and most approved kinds. The progress made by the Spanish woollen manufacturers since 1851, is of a most striking character, displaying results which bring their productions almost on a par with the most advanced manufacturers of any country. printing of their dyes, and clearness and beauty of their blended colors, are equal to those of France, Austria, and the United Kingdom.

Russia, which wears the crown of "debatable honor" in English eyes, was, fifty years ago, merely an agricultural nation. Manufactures began to spring up under the continental system, but were crushed by the policy of Alexander, who, at the close of the war, gave free admission to the goods of his late ally. In 1824, Count Nesselrode established the system which achieved the industrial independence of Russia. That empire has now 45,000,000 sheep, of which 18,000,000 are merinos. In 1849, the woollen industry employed 495,000 workmen,

^{*} Ohio Agricultural Report, 1862, p. 498.

[†] International Exhibition of 1862. Reports of Juries, Class 21.

distributed in 9,172 establishments; besides employing a vast number in making carpets and common stuffs in the cottages of the peasantry. It supplies almost entirely the domestic consumption, including clothing for her vast army, none of which was made in the empire before 1824. In cloths alone the production is more than \$20,000,000. Russia exports even more woollen goods than she imports. In 1850, she imported woollen goods of the value of \$1,000,000, and exported to the amount of over \$2,500,000, principally to China and Central The people of Russia, employed by this and kindred manufactures, consume at home the enormous products of their agriculture. Of the 1,600,000,000 bushels of corn, which is the product of their soil, they export only 15,000,000, less than one per cent of the total cereal product. The question arises, Can manufactures, so completely exempted from foreign competition, attain that excellence which is necessary for true industrial progress? Let the English judges again answer. They say, in 1861, "Those who remember the woollen goods exhibited from Russia, in 1851, and compare them with the goods exhibited now, cannot fail to be struck with the remarkable progress made in every branch of manufacture, cloths, beavers, fancy cassimeres, mixed fabrics, and shawls, &c.; all bear evidence of the improvement, and show a degree of excellence, which, as regards make and finish, place the production of Russia on a par with some of the oldest manufacturing countries." †

The present manufacturing prosperity of these, as well as other industrial States of continental Europe, naturally suggests this inquiry, What would have been the future industrial condition of continental Europe, if, at the time when peace restored the nations to labor, the textile manufactures had been left to their own free course, and no legislation had

[·] Bernoville, Industrie des Laines peignées, p. 90, et seq.

[†] International Exhibition of 1862. Reports of Juries, Class 21.

intervened to regulate their progress? Can there be any doubt that they would have become the exclusive occupation Alone in the possession of steam power and of England? machinery; alone provided with ships and means of transport; alone endowed, through her stable legislation, with capital to vivify her natural wealth, she had absolute command of the markets of the continent. The question was presented to the continental nations, whether they should accept the cheap tissues of England, or, at some sacrifices, repel them, to appropriate to themselves the labor and profit of their production. The latter course was successively adopted, with some modifications, by each of the continental nations; and with what results to their own wealth, and the industrial progress and comfort of the world! Instead of a single workshop, Europe has the workshops of France, Russia, Austria, Prussia, Belgium, Sweden, Denmark, Spain, each clothing its own people with substantial fabrics; each developing its own creative genius and peculiar resources; each contributing to substitute the excellence of competition for the mediocrity of monopoly; each adding to the progress of the arts and the wealth and comfort of mankind.

It remains for me now to illustrate the national importance of the wool manufacture by the industry of our own country. I shall not attempt to describe the successive steps of the progress by which this manufacture has attained its present position. I can add nothing which is not already familiar to the members of this Association, or which may not be found in easily accessible sources of information. The most striking feature in the brief history of our manufacture is its instability. As in

[•] The trade of Germany at the beginning of the century was hides, tallow, flax, and wool, exported for cloth and cutlery in return. Since 1815, Germany has made its own cloths and cutlery. The balance in favor of exportations of woollen goods from the Zollverein, from 1846 to 1848, was 3,316,000k; and the total production in 1849 was 403,750,000 francs. Such were the consequences of the adoption of a common system of protection.

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the continental states of Europe manufactures were called into being by their respective governments, the very existence of the woollen industry in this country depended upon the national legislation, or such a state of national affairs as would restrain the competition of the older and well-established foreign manufactures. By the war of 1812, which accomplished for this country what the continental blockade did for France, the woollen manufacture was brought up from a product of only 4,000,000 in 1810 to 19,000,000 in 1815; only to be overwhelmed by the enormous importation, at the close of the war, of 70,000,000 in woollens and cottons at an ad valorem duty of 5 per cent.* Reviving in 1816, by the aid of a duty of 25 per cent, and the free admission of raw material, the interest was depressed again in 1820, by the fall of the duty to 20 per cent. The manufacturers were stimulated to new enterprises by the increased duty of 331 per cent established after June, 1825, and by the still increased rates of the tariff of 1827; but the expected benefits were neutralized by the high duties placed upon the raw material. The characteristic instability was continued under the biennial reductions of the compromise policy of 1832. The stimulus of the favorable tariff of 1842 was followed by the crushing influence of the ad valorem tariff of 1846, which, placing an equal duty upon wool and its manufactures, and in some cases a higher duty upon the former, gave no protection, or discriminated against American The effect of this measure was the destruction of American broadcloths, and, at the same time, the extinguishment of our Saxony sheep. The tariff of 1857 was productive of some benefit by enlarging the free list. Finally, the so-called Morill tariff of 1861, since modified by the law of 1864, gave, not by increasing the duty, but by establishing just relations between the duties on manufactures and raw material, the

At this time, full-blooded merinos sold for one dollar apiece. Bucks had been sold during the war for a thousand dollars apiece. Randall's Practical Shepherd, p. 24.

first encouragement that our industry might be established upon a permanent basis, and become here what it is elsewhere, a pillar of national prosperity. Notwithstanding the legislation, often unfriendly and always uncertain, the woollen manufacture had become established in 1860 as a great industrial power, and, by the amount, variety, and excellence of its products, had proved itself eminently worthy of national favor.

I am indebted to Mr. Kennedy, the late admirable Superintendent of the Census of 1860, for proof-sheets of the chapters on "woollen" and "worsted goods" of the forthcoming volume of the Census upon "Manufactures;" a work which while passing through the press, has been most cruelly taken from the hands of the one who conceived and executed it. The total values of the several manufactures of wool in 1860 were as follows:—

Carpets		•	•	•	•	•	•	•	\$7,857,636
									7,280,606
									2,403,512
									3,701,378
Woollen									
									61,895,217
	То	tal							883,138,349

"On the first of June, 1860, the number of establishments employed on woollen goods, exclusive of worsted dress goods, was 1,260. They represented a capital of \$30,862,654, and consumed 83,608,468 pounds of wool, and 15,200,061 pounds of cotton, costing, with all other materials, \$36,586,887. They worked 3,209 sets of machinery. They gave employment to 24,841 male and 16,519 female hands, or 41,360 persons, whose annual wages cost \$9,808,254. The aggregate value of the product amounted to \$61,895,217."

"With a decrease of 557 in the number of establishments, as compared with the census of 1850, doubtless in part occasioned by a more complete exclusion from the recent tables of such

accessory and kindred branches as wool-carding and worsted mills, the aggregates show an increase of \$4,791,112, or 18·3 per cent in capital invested; \$11,674,432, or 46·8 per cent in the expenditure for raw materials; 6,465, or 18·5 per cent in the number of hands; and \$2,640,354, or 36·8 per cent in the annual cost of wages, while the aggregate value of the manufactured product appreciated \$18,352,929, or 42·14 per cent upon the returns of 1850. The gross proceeds of the manufacture, after deducting the cost of materials and labor, was \$15,527,367, or upwards of fifty per cent upon the capital employed, to cover the interest on capital, the wear and tear of machinery, and various incidental expenses."

"The consumption of wool amounted to an average of 2.61 pounds per capita for the entire population of the Union. It was in the proportion of five and one-half pounds to every pound of cotton used in the business. The quantity of cloth manufactured exceeded the amount returned in 1850 by 42,-691,210 yards, or fifty-two per cent, and the weight of yarn was 2,106,870 pounds, or nearly fifty per cent greater than in that year. The product in cloth was equivalent to nearly four yards to each inhabitant of the Union, and in value averaged nearly two dollars (\$1.97) per capita. The average annual wages of each operative was \$237, or \$32 greater than in 1850." (Compare this with the annual wages of the French workman, \$78.70!)

According to the same report, the worsted manufacturers had in 1860 an invested capital of \$3,460,000. "They employed 110 sets of cards, and 1,101 male and 1,277 female hands, whose aggregate yearly wages amounted to \$488,736. The raw materials were 3,000,000 pounds of wool, worth \$1,554,000; 1,653,000 pounds of cotton, costing \$196,640, besides madder, and other dye-stuffs, coal, oil, &c., costing altogether \$2,767,700. The cost of wool was 51 cents, and of cotton 11.8 cents a pound. The aggregate product was 22,500,000 yards, valued at \$3,201,378."

Keeping in mind the total value of our manufactures of wool in 1860, according to the census returns, we have some means of forming an estimate of the progress of our manufactures since that period, from the reports of the Internal Revenue for 1864. From the amount of internal revenue paid upon those classes of manufactures of wool enumerated at three per cent, I have calculated the total value upon which that revenue was paid in each State. The aggregate is \$121,-868,250.33. It will scarcely be suspected that the value has been exaggerated. The value in each State is as follows:—

Massachusett	s .								\$40,603,651.00
Pennsylvania	٠.								
Connecticut .									15,866,641.00
New York									13,977,775.00
Rhode Island	١.								10,892,700.33
New Hampsl	aire				•				9,079,677.00
Vermont .			•	•	•	•	•	•	3,708,721.67
New Jersey			•			•	•		2,778,084.00
Maine .			•	•	•	•	•	•	2,476,483.67
Ohio			•			•	•		1,400,877.67
Indiana			•	•	•	•	•	•	558,615.33
Delaware .			•	•		•	•	•	· 548,134.67
California .		•	•	•	•	•		•	538,956.00
Maryland .					•		•		451,912.00
Kentucky .		•	•	•		•	•		359,905.00
Illinois		•		•	•	•	•		859,084.33
Michigan .			•	•	•	•	•	•	151,848.33
Oregon		•			•	•	•	•	128,620.67
Iowa			•		•	•	•	•	118,305.33
Missouri		•	•	•	•	•			75,344.00
Wisconsin .			. •		•	•	•		105,317.67
West Virginia	а.	•		•		•	•	•	63,753.00
Kansas			•	•	•	•	•	•	14,947.67
Minnesota .			•	•	•	•	•	•	9,146.00
Nebraska Ter	Tite	ory	•	•	•	•	•	•	45.65

A great progress is indicated by the returns made to the office in answer to about 1,700 circulars sent out. The total

number of sets in 1860, according to the census, was 3,319; 931 returns received at the office of the Association on the first of September,* 1865, reported 4,073 sets of cards, consuming 2,275,855 pounds weekly of scoured wool, of which 1,636,821 is domestic, and 639,034 is foreign; the weekly average per set being 559 pounds. The census returns of 1860 were complete. According to our list 608 mills remain to be heard from. Returns are coming in daily, and it is believed the number of sets will not fall short of five thousand.

Another indication of progress is the greatly increased consumption of wool. The total amount of wool produced in the United States in 1860, according to the census, was 60,264,913 pounds, all of which was consumed in our manufactures. The amount imported in that year, according to the report of Messrs. Bond and Livermore, was 32,371,719 pounds,† making the total amount consumed 92,636,632 pounds. The home product of 1864 is estimated, by the Department of Agriculture, at not less than 80,000,000 pounds.‡ The amount imported was 72,371,503 pounds.§ Total, 152,371,503 pounds, an increase of 59,734,871 pounds, or sixty-one per cent.

Not the least interesting result, which is at the same time the cause and effect of the increase of our woollen manufacture, is one eminently national; viz., that we have been able to clothe our vast army with our own fabrics, and by only the national expansion of our industry. By our looms and sewing-machines we furnished, in one year, not less than 35,174,608 garments. Mr. Bond, chairman of our "Committee on Raw Materials," estimates, from official reports received from the Quartermaster-General of the United States of the quan-

The Table in the Appendix contains the aggregate results up to Oct. 25th, 1865.

[†] Wool Report to the Boston Board of Trade for 1864, by George William Bond and George Livermore, p. 8.

[†] Monthly Report of the Agricultural Department for January, 1865, p. 22.

[§] Report of Messrs. Bond and Livermore for 1864, p. 8.

Report of Messrs. Bond and Livermore for 1864, p. 7.

tity of woollen goods purchased for the army in 1862 and 1863, that the quantity of wool consumed in our mills for army use was, in —

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1862 . . . . . . . . . . . . . . . . . 51,400,000 lbs. 1863 . . . . . . . . . . . . . . . . . . 61,300,000 ,, 1864, no returns, say . . . . . . . . . . . . 61,300,000 ,,
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To this must be added the consumption for the navy, and for cartridges, and the total cannot vary much from 200,000,-000.

Compare this with the condition of the country at the commencement of the war of 1812, when the Secretary of War was compelled to ask Congress for permission to import 5,000 blankets for the supply of the Indians.

This is but one of the many illustrations which the war has furnished of the great truth of political economy, that a nation is powerful and independent, just in proportion as it cultivates a variety of industry in its people.

"The war and its incidents," says Dr. Elder,† "shed a flood of light upon the effect of a well-secured home consumption for agricultural products of every kind, of which the woolgrowing interest is an example. In the ten years before the rebellion, the sheep of Pennsylvania had decreased 12 per cent in number. In May, 1864, the Agricultural Bureaureports an increase of 76 per cent in four years. In Illinois, they had fallen off in the last census decade 14 per cent. In the first two years of the war, according to the report of the county assessors, they had increased from 769, 135 to 1,206,695, and the editor of the Chicago "Tribune" estimates the number at 3,000,000 at the close of the year 1864, an increase of two hundred and ninety per cent in four years. This immense advance is owing simply to a protective

Pamphlet entitled Free Trade in Raw Materials considered in its Effect upon all Classes of the People. New York, 1855, p. 14.

[†] The Western States, their Pursuits and Policy, p. 22.

tariff, aided by the high rate of foreign exchange and absolute possession of the home market."

I shall not enlarge further upon the American woollen industry. It may appear that I have not done it justice. It would have afforded me satisfaction to give, from original sources, special details of our manufacture; to enumerate the fabrics in which we excel; to specify the inventions which we have contributed; to do honor to the great men whose genius and enterprise have built up the pillars of our industry; to exhibit its peculiar social and economic relations in this country; in a word, to contribute facts from our manufacture to serve to illustrate the general progress of the arts. But the experience and observation of many years, instead of a few · months, are necessary for such a work. It can be done, indeed, by no one man. Each one of you, gentlemen, must spare time and thought to contribute materials for such a work as shall be a worthy record and monument of your labors. In this way you will subserve the highest object of our Association.

But the time has not yet come for the woollen manufacture to vaunt of its achievements. Its career has but commenced. Its aim is nothing less than to clothe the American people with indigenous fabrics. In twenty years preceding 1862, we imported foreign woollen manufactures of the value of \$429,422,951,—an average of upwards of 19,000,000 a year. To displace the foreign manufacture, and supply a population of 35,000,000, to be doubled in thirty more years,—consuming more woollen goods than the same number of any people in the world,—a field for gigantic enterprise is opened to the American manufacturer. This consideration leads to the second branch of my subject:—The means of developing the woollen manufacture.

The requisite above all others necessary for the development of our manufacture, is a sufficient and diversified supply of the raw material,—wool. For this our main dependence must always be upon our own agriculture. An instinctive sentiment of patriotism leads every consumer to prefer a home product, if it will suit his purpose equally well with a foreign product. It is for the interest of the consumer to buy at home; he saves commissions, exchanges, transportation. He can select exactly what he wants, and he can sell his own products where he buys. The statistics collected by the Association show that the vast majority of the manufacturers of the country use only domestic wool. Of 4073 sets, 2171 are employed wholly upon domestic wool. Of 931 mills, 767 use domestic wool; while only 46 mills in the whole country use foreign wool alone.

So absolute is the dependence of the manufacturer of each nation upon the wool-growers of his own country, that the characteristic features of the manufactures of different nations have been impressed by the peculiar conditions of their agriculture. I will cite some examples, which will serve at the same time to show the direction towards which it is desirable our own agriculture should tend.

The sheep of England at an early period were divided into two distinctly marked classes. The one class, thriving upon the dry uplands, produced a short wool, adapted solely for making felted cloths, called clothing wool. Of this class, the original Southdown was a type. The other class, of greater size, flourishing upon the rich moist plains, produced wool characterized by great length, strength, transparency, and the little degree in which it possessed the felting property. This wool, fitted for making serges and stuff-goods, was called combing wool, from the instrument used to make the fibres straight and parallel preparatory to spinning. The type of this class was the Leicester sheep. In raising sheep of both kinds, the primary object anciently was, the product of wool; the mutton being merely accessory.

Under the old system of pasturage, it was found that but a given number of sheep could be kept on a certain space of ground; and, throughout a portion of the year, they were deficient in nourishment. Towards the end of the seventeenth century, the culture of turnips was introduced from Holland to England, with the financial and political institutions brought over by William III. Under the new system of agriculture, the artificial or turnip husbandry, a regular supply of food was provided for each season of the year, and double or treble the number of sheep could be kept upon the same land. The agriculturalists of England then began to perceive that the meat of the sheep was a more important source of profit than the wool, and that the wool must be the accessory. The revolution, which established the superiority of meat over wool, was principally due to Bakewell, of Dishley, to whom England owes hardly less than to Watt and Arkwright. Before his day, the English sheep were not fit for the butcher till about four or five years old. He conceived that if it were possible to bring sheep to their full development before that age, - to make them fit for being killed at two years old, for example, the produce of the flocks by this means would be doubled. To accomplish this, he applied to the old Leicester sheep of his neighborhood what is now the well known principle of selection in breeding, but which may be said to have originated in his brilliant experiments. So complete was his success, that the breed obtained by him, called the "New Leicester," is unrivalled in the world for precocity, produces animals which may be fattened as early as one year old, and, in every case, have reached their full growth before the end of the second year. To this invaluable quality is added a perfection of shape which renders them more fleshy and heavier for their size than any known breed. Bakewell himself was not wanting in remuneration for his labors. So great was the appreciation of his new flocks, that he let his rams for one season for the enormous

sum of six thousand guineas. The "New Leicester," in time, came to be the most numerous and widely extended breed in all England. In many districts, they displaced the shortwool breeds; in others modified them. The extension of this breed gave preponderance to the production of the long wool with which it was clothed. The great value of Bakewell's labors consisted, not only in contributing a new race realizing the maximum of precocity and return, when placed on suitable lands, but in pointing out the means by which other indigenous races might be improved. The ancient race of the Downs, adapted for the highlands where the "New Leicester" did not thrive, originally producing short clothing-wool, was formerly of small size, and yielded but little meat, and would seldom fatten until four years old. By a careful selection of breeders, and the good winter regimen which the turnip husbandry gives, the English breeders caused the Southdown to become the rival of the "New Leicester" in early development and perfection of shape. They fatten generally when about two years old, and are sold after the second clip. But a change was also effected in the character of the fleece, which the farmers at first refused to believe. It lost the character of a clothing-wool. It became longer and coarser. As Mr. Youatt says, - "That which was once a carding, had become a combing-wool; and useful and valuable for a different purpose. It had not deteriorated, but it had changed." The same change, from the same cause, has been effected in the Cheviot wool of Scotland.

The result of this direction of the agriculture of England, to seek profit rather from the meat than the wool in the culture of their flocks, is truly astonishing when a comparison is made with France,—which pursues a different system,—making the meat accessory to the wool, as it is with us. Each country

[•] Youatt on Sheep, p. 227.

has an equal number of sheep. But England feeds one sheep per acre, while France feeds only one-third of a head. The produce of the English sheep is double that of the French; and the average return of an English sheep-farm is six times greater than a French one.*

The effect of this system upon manufactures is no less remarkable. The wool of England, without the knowledge or purpose of her farmers, has become a combing-wool; and the worsted manufacture, through the unconscious influence of English agriculture, has become developed to such an extent, that the towns of Yorkshire have grown up as marvellously as those of our great West.

The uses of the wool have changed. It was anciently employed principally for making says and serges,—grave stuffs for monks or mourners. It is now principally used for making light fancy fabrics for female apparel. Spencer describes envy as clad in a garment of this wool:—

"All in a kirtle of discolored say,

He clothèd was y painted full of eies." †

The female of modern times, arrayed in the bright-colored textures of Bradford, may be likened to the Fidessa of Spencer in her outward aspect:—

"A goodly lady clad in scarlet red, Purfled with gold and pearls." ‡

I need not make the application of the lesson contained in these facts to our own country. We imported in 1860 \$15,000,000 of worsteds, principally from England. We made only \$3,000,000. To replace the English worsteds we have absolutely no raw material, and depend wholly upon the Leicester and Cotswold wools of Canada. Why should not the American, as well

Rural Economy of England, Scotland, and Ireland, by Leonce De Lavergne, translated from the French. Edinburgh and London, 1855, p. 27.

[†] The Faerie Queene, Book i. Canto iv.

[†] The Faerie Queene, Book i. Canto ii.

[§] The wool known in our markets as Canada wool consists wholly of fleeces from the long-wooled Leicester, Cotswold sheep, and crosses of these breeds with the South-

as the English farmer, seek a profit in mutton and wool as well as in wool alone, and thus supply the greatest necessity of American manufacture?*

Another example of this dependence of manufactures upon agriculture is found in France. The attempts of Colbert to naturalize the merino had so utterly failed, that it was believed impossible to raise or multiply this invaluable animal under the climate of France. A century after Colbert had made his attempts, Trudaine, the Minister of Finances under Louis XV., had direction of the department of commerce. Although at that time the happy effects of the administration of the Minister of Louis XIV. were evident, in the progress of French industry, the indigenous wools were all of moderate quality, and the manufacturers obtained all their choice wools from abroad. Spain threatened to organize manufactures of her own, and it was feared that France would be no longer able to obtain her choice wools. To remedy this evil, Trudaine conceived the happy thought of applying to Daubenton, already distinguished

down, recently introduced from England. Mr. Stone, of Guelph, Canada West, has taken the lead in the introduction of these sheep. The flocks in Canada are small, averaging from 20 to 50 head. It has been estimated that 6,000,000 pounds of long wool will be grown this year. Large numbers of Canadian sheep have been carried to the West during the present season. The consumption in the United States of Canada wool for the present year, is estimated by Mr. Cameron, an intelligent worsted manufacturer, whose data, showing the consumption of each mill, are now before me, at 5,500,000 lbs. The success of the Lowell Manufacturing Company, in fabricating alpaca goods from Canada lustre wools, has demonstrated that the wool does not deteriorate. The Canada wool has been found equal to the best English lustre wool, imported expressly for comparison. The free wool of Canada has been an inestimable boon to our worsted manufacturers. It does not compete with the production of our own farmers, as we grow hardly more than 200,000 lbs. of long wool, while Canada consumes 300,000 lbs. annually of our clothing wool. It is not possible that our own production of long wool will keep up with the demand.

Long-wooled Flemish sheep have been recently imported from Friesland by Mr. Chenery, of Belmont. They are said, by Youatt (p. 176), to be more prolific than any English breed. Their milk is valuable, and is used by the Dutch in the manufacture of a considerable quantity of cheese of a good quality.

[•] See an excellent article, on the Condition and Prospects of Sheep Husbandry in the United States, in the Report of the Commissioner of Agriculture for the year 1862, p. 242, in which the raising of long-wooled sheep is forcibly recommended.

for his profound investigations in zoology and comparative anatomy at the Museum of the Jardin des Plantes, where he was associated with the illustrious Buffon. Daubenton, who had studied the question of domestic animals with Buffon, did not hesitate to accept the mission of ameliorating the domestic sheep of his own country. The government furnished him the means of establishing a sheep-fold for experiments at Montbard, his native country; and, in the space of ten years, viz., from 1766 to 1776, he had solved the problem which, for a century, had been thought impossible. He produced superfine wool from the coarse native sheep of France. "I allied," he says in his instructions for shepherds, "rams whose wool was the finest with ewes having as much hair as wool, to judge by extremes the effect of the wool of the ram upon that of the ewe. I was surprised to see issue from this cross a ram with superfine wool. This great amelioration gave me the more hope for the success of my enterprise, as it was produced by a Rousselon ram.* I had at that time had no Spanish rams." "By these experiments, continued with the greatest precautions," he continues, "I brought all the races of my sheepfold to the degree of fineness of Spanish wool without using any Spanish stock." He caused his wools to be made into fabrics at the Gobelin manufactory, and the stuffs were pronounced to have all the fineness of those made with Spanish wools with more nerve and strength. Convinced by this success, Louis XVI. obtained from the King of Spain, in 1786, a flock of merinos, which he placed at Rambouillet, under the direction of Daubenton. Enlightened by his previous labors upon the domestic sheep, the practical naturalist found no difficulty in acclimating and ameliorating the Spanish race. The flock at Rambouillet was multiplied. It furnished an example and supplied reproducers, which were spread everywhere throughout A school of shepherds was organized; other national France.

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[•] The finest of French native breeds. Noveau traité sur laine, p. 67.

sheepfolds were founded, and the merinos were established in France. Daubenton continued to publish treatises upon their management. Even fifty-three years after his first labors, when 84 years old, he addressed the Institute in relation to experiments upon sheep which he was then carrying on.

[•] One of the most interesting results of the acclimatation of the merinos in France is the creation of a new and perfectly fixed race, remarkable for its silky wool, called the Manchamp race. In 1828, there was accidentally produced at the farm of Mauchamp, cultivated by M. Graux, a ram, badly and even monstrously formed, having a head of unusual size and a tail of great length, but having a wool remarkable for its softness, and above all for its lustre, which resembled that of silk. This was the second animal of the kind which had been born in the flock of merinos at Mauchamp; the first had been killed by the mother. Mr. Graux separated it from the flock, and raised it apart, to prevent any accident, and used it for reproduction; obtaining some animals similar to the sire, and others to the dam. Taking afterwards the animals similar to the sire, and crossing them among themselves or with the sire, which served as a type, he succeeded in forming, little by little, a small flock of animals whose wool was perfectly silky. When he had arrived at this result, he occupied himself in modifying the forms, which he easily accomplished; and finally in modifying the size, originally quite small, but which is now the same as that of ordinary French merinos, - rams of three years old weighing as much as 80 kilogrammes, and a flock of six hundred head producing on an average two kilogrammes of wool washed on the back. As with all innovators, M. Graux met on all sides detractors of his discovery. The farmers pretended that the ailky type could not be preserved when transported from Mauchamp; and the manufacturers asserted that the wool was so pliant and slippery that nothing could be done with it. They even complained of the very qualities which distinguish it. It is probable that the discoverer would have renounced the development of this magnificent race, if he had not been encouraged by an annual subvention from the government, obtained by M. Yvart, the Inspector-general of the imperial sheepfolds. In 1853, M. Davin, a manufacturer distinguished for his zeal and skill in introducing new material to the textile arts, experimented upon the material rejected by others. He succeeded in making magnificent stuffs which excited the admiration of all connoisseurs. They exhibited, in the tender colors especially, reflections of light which had never been before observed, and a softness which had never been found in any material of wool of any degree of fineness. The silky lustre was so marked, that, in a challis made with a silken warp and weft of Mauchamp wool, although the stuff contained only one-eighth of silk and seven-eighths of silky wool, it was as brilliant as if made entirely of silk. Merinos, mousselines, satins of China, and shawls, made of this material, equalled, if they did not surpass, analogous products made of the finest Cashmere yarns. The commission of savans, who reported upon the qualities of this new race to the Imperial Society of Acclimatation, say: "The silky wool is destined to replace completely in our industry the Cashmere which comes from Thibet. It is fully as brilliant as Cashmere, fully as soft; and, while it costs less as a raw material, it requires less manipulation to be transformed into yarn, since it does not contain the hair (jarre), which must be removed from the Cashmere." In 1857, a medal of the first class was decreed to M. Davin for his industrial application of this material; and the society above referred to has proposed a prize of 2,000 francs for a flock of one hundred animals of the silky type. Bulletin de la Société Imperiale Zoologique d'Acclimatation, t. v. p. 118, also t. vi. p. 502.

Although it was scarcely before the establishment of the empire that the advantages of the new race began to be understood, one-fourth of the sheep of France consist at present of merinos from this stock. The merino of France has become. through the culture of her agriculturalists, one of the most distinct of the merino races. In size and weight of washed wool it surpasses all other merinos, and their French savans say of them, "We are at present the first in the entire world for the fineness and quality of our wools, and the beauty and good conformation of the merinos which produce them." Within even the present year the Imperial Zoölogical Society of Acclimatation, at the instance of its President, - the illustrious Drouyn de L'huys, the Premier of Napoleon III., - has dedicated a statue to the great naturalist who endowed France with this magnificent legacy, to prove, in the language of its Vice-president, "that no true glory passes unperceived, that every serious servitor of his country and humanity receives sooner or later his just recompense." *

What has been the effect of this agricultural achievement of France upon the character of her fabrics? The high culture of the French sheep for the purpose of obtaining great size and weight of fleece, has done for the merino in France what it did for Southdown in England; it has added length to the fibre, and made it a genuine combing-wool.† Its value for this pur-

[•] M. Richard, Vice-president of the Imperial Society of Acclimatation. See Bulletin de la Société Imperiale Zoologique d'Acclimatation, 2 Sevie, t. i. November, 1864, p. 647, et seq.

[†] Although the prevailing character of the French fleeces is as above described, a breed of sheep has been cultivated to a limited extent in France which rival in fineness of wool the most reputed flocks of Saxony. They are called the sheep of Naz, and have been cultivated by an agricultural association of that name for over sixty years. The original nucleus of the flock was derived from the most ancient of the Royal Cabanas, and the flock has been increased without any admixture of foreign blood. The flock in 1840 had been reduced to about 500 head, but the wool still preserved its reputation for fineness, softness, force, and elasticity. The price at that time was about five francs the kilogramme for wool in the yolk, which was double the price of the wools of Rambonillet. The average weight of the fleeces is a little less than two kilogrammes, or about 4 lbs. Gen. Lafayette raised sheep of this race at La Grange; and

pose is thus pronounced by one of the most eminent of the practical manufacturers of France:—

- "There are two facts we ought to proclaim abroad.
- "The first is, that without the introduction of the Spanish race into our flocks, and without all the skill of our agriculturists, we should still vegetate in dependence upon neighboring nations, and should be reduced to clothe ourselves with their stuffs. It is to the admirable revolution in the raising of ovine animals that we owe the beautiful industry of spinning the merino combing-wools. It is to this that we owe the splendor of the industries of weaving combing-wool at Paris, at Rheims, at Roubais, at Amiens, and St. Quentin.

"The second fact is, that the aspect, the quality, the character of our modern tissues, in a word, all that makes them deserve, for forty or fifty years, the name of new inventions, is due principally to the particular nature of the combing-wool obtained by the Spanish cross. There are few, very few inventions, in the contexture of the stuffs, or in their mounting upon the looms, which are still the same as in the 18th century. It is because it has been favored by the wool of merinos that the 19th century has changed the physiognomy of the tissues of preceding ages."

Before inquiring what profit our manufacturers can derive from these facts, I wish to cite an American example of the influence of agriculture upon our manufactures, and pay homage to an American name less widely known but hardly less deserving of honor than those of Bakewell and Daubenton.

Col. Humphreys, who had been a member of Washington's family at his home on the Potomac, and had been imbued with a taste for agriculture by the immortal farmer of Mt. Vernon, having been afterwards Minister to Spain, made the first im-

in a letter to Mr. Skinner, in 1828, recommends their introduction into the United States. — New England Farmer, vol. vii. p. 92. See Bulletin de la Société d'Acclimatation, vol. vii. p. 479.

[·] Bernoville, p. 165.

portant importation of pure merino sheep from the Spanish cabanas. In 1813, Stephen Atwood, of Woodbury, Connecticut, bought a ewe of Col. Humphreys. He bred this ewe and her descendants with rams in his neighborhood, which he knew to be of the pure Humphreys's blood, until about 1830, after which he uniformly used rams from his own flock. This flock gaining much public favor, although full of what would be now regarded deficiencies, attracted the attention of Edwin Hammond, a farmer of Middlebury, Vermont, who made considerable purchases of Mr. Atwood's sheep in 1844 and 1846. A distinguished member of this Association, whose invaluable contributions to American-sheep husbandry place him by the side of the illustrious Von Thaer in Germany, thus describes the physiological achievements of Mr. Hammond: "By a perfect understanding and exquisite management of his materials, this great breeder has effected quite as marked an improvement in the American merino as Mr. Bakewell effected among the long-wooled sheep of England. He has converted the thin, light-boned, smallish, and imperfectly-covered sheep above described, into large, round, low, strong-boned sheep, models of compactness, and not a few of them models of beauty, for fine-wooled sheep. I examined the flock nearly a week in February, 1863. They were in very fine condition, though the ewes were fed only with hay. Two of them weighed about 140 lbs. each. One of the two largest ewes had yielded a fleece of 171 lbs., and the other, 141 lbs., of unwashed wool. The whole flock, usually about 200 in number, — with a due proportion of young and old, including say two per cent of old rams, and no wethers, - yields an average of about 10 lbs.

[•] It was stated at a public discussion at the Vermont State Fair, in September, 1865, that Mr. Hammond was offered \$10,000 for his celebrated ram Gold-drop, but the owner refused to sell him. He alone possessed the characteristics he had been striving for for years. The President of the Society stated that Mr. Hammond was present when the lamb, which became so valuable, was dropped. He turned it over, and examined it with the warmest admiration, and exclaimed, "Welcome! I have been looking for you fifteen years and more, and now I have got you."—Boston Evening Courier, Sept. 16th, 1865.

of unwashed wool per head. The great weight is not made up by the extra amount of yolk" (although it must be admitted that this is not the prevailing opinion of manufacturers), "but by the extra length and thickness of every part of the fleece. It is of a high medium quality, and very even. In every respect this eminent breeder has directed his whole attention to solid value, and has never sacrificed a particle of it to attain either points of no value or less value."* The genius of the American breeder received its crowning honor at the International Exhibition at Hamburg, in 1863. Sheep bred from Mr. Hammond's stock, exhibited by Mr. Campbell, — "among 350 competing sheep from Austria, Prussia, Germany, and France, - received a first prize for the best ram, a second prize for the second best ram, and a first prize for the best cwes." † The fleeces of the Vermont breeds may be regarded as types of the American merino fleece, and the character of this wool has exerted a marked influence upon American manufactures. It is not a clothing-wool, for the American merino wool exceeds all other merino wool in length. The wool exhibited at Hamburg was from 25 inches to 31 inches long; and, according to German authorities on wool, 14 inches is the extreme limit for the length of clothing-wool for the filling. # Hence we have comparatively no manufactures of broadcloth. American merino wool is fitted for fancy cassi-

[•] The Practical Shepherd, by Henry S. Randall, LL.D., p. 29.

[†] See extract from the official record of awards, published in the Rural New Yorker, September 9, 1865. The class of merinos in which Mr. Campbell's were shown was "stocks which have been bred with especial reference to quantity of wool."

^{† &}quot;A length of 1½ inches may be regarded as the extreme limit for card (clothing) wool. It is true a longer wool may be used, but then it is only for the warp of the tissues, and the wool required for this purpose is only two-fifths of the quantity employed." Traité des Bêtes Ovines par Aug de Weckherlin. Intendant de Prince de Hohen Zollern, p. 90.

[§] Since the above statement was made, I have learned that it requires a material qualification, and I am happy to say, that a name identified with the establishment of the cotton manufacture in the United States is to be associated with the revival of the

meres, in which we excel; for fine shawls, in which we have attained great perfection; for mousselines de laine, which we have of great excellence, and which we owe to our American fleeces. The true value of the fleece of the American merino is for combing purposes, for which it has remarkable analogy with that of France. This country will never know the inestimable treasure which it has in its fleeces, until American manufacturers appropriate them to fabricate the soft tissues of merinos, thibets, and cashmeres, to which France owes "the splendor of the industries of combing-wool at Paris, Rheims, and Roubaix." Although our main dependence for raw material must always be upon our agriculture, it supplies but little more than three-fourths of our wants, and it is probable will never supply it wholly. Our farmers will probably never attempt to supply the cheap coarse wools which Egypt and South America furnish, nor will they soon abandon the lusty merinos for the small and delicate Saxons.* For our very coarse, and, for some time to come, for our very fine, and for our long wools, we must depend upon the foreign market. Our manufactures certainly cannot be extended unless we can be on some terms of equality with foreigners who have no restriction in the supply of raw materials; for all the principal

broadcloth manufacture in this country. During the present year the Webster Woollen Manufacturing Company, under the auspices of Mr. H. Nelson Slater, has established, on a very large scale, the manufacture of broadcloths, which rival the best German fabrics.

For the best history extant, in our language, of the fine-wool husbandry of Germany, the reader is referred to the article of Mr. Fleischman in the U. S. Patent Office Report for 1847.

^{*} I refer to the wool growers of the north and west. With the auspicious advent of free labor, an inviting field for fine-wool husbandry is opened on the Appalachian slopes of the Southern States, and the prairies of Texas. I have the authority of Mr. Gilbert, of Ware, whose opera cloths, made of the finest Saxony and Silesian wools, have replaced the best French goods in the New-York market, for saying that most admirable fine wools have been grown in the "Panhandle," Virginia. Judge Baldwin, the late eminent examiner in the class of "Fibres and Textiles" at the U. S. Patent Office, and formerly a practical flockmaster in Tennessee, assures me that the culture of fine-wooled sheep can be pursued to the utmest advantage in the Southern States. Cotton may not be king even in its own vaunted domain.

manufacturing nations of Europe have practically thrown open their markets to the raw material of manufacture.* I will refer to but one instance of the impolicy of even the present comparatively moderate restrictions upon raw material. We have already constructed, in this country, machinery adapted for the manufacture of bunting, webbing, braids, and bindings, sufficient to make all required in the United States. The long combing-wools required for these manufactures cost in England 35 cents, and pay a duty of 12 cents and 10 per cent, averaging about 45 per cent. Two pounds of wool are required to make a pound of worsted, and the revenue tax on the manufactured goods, therefore, equals 12 per cent on the raw material. Without any duty on the imported worsted, the foreign manufacturer would have an advantage of 57 per cent. The duty on bunting, made wholly of worsted yarn, is 50 per cent. The foreign manufacturer has therefore an advantage at present of 7 per cent in the manufacture of bunting. A large portion of the worsted yarns now made, enter into the fabrication of those beautiful goods called fancy hosiery goods, zephyrs, nubas, &c., - for which the manufacturers of Philadelphia are so celebrated. The only protection which the

Great Britain Free.

Zollverein, includi and 21 other Sta	ng Prussia stes	s, Saxony, }	n
Netherlands .			"
Russia			20 copeks per pood or about 2 cents per pound.
Austria			2d. per centner (or 128½ lbs. avoirdupois.)
Spain			Common 35s. 5d. per 100 lbs.; Saxon, 23s. 9d. per 100 lbs.

Rates of duty on wool imported into the principal manufacturing nations of Europe,
 according to the Customs Tariffs of all nations, up to the year 1855:—

meres, in which we excel; for fine shawls, in which we have attained great perfection; for mousselines de laine, which we have of great excellence, and which we owe to our American fleeces. The true value of the fleece of the American merino is for combing purposes, for which it has remarkable analogy with that of France. This country will never know the inestimable treasure which it has in its fleeces, until American manufacturers appropriate them to fabricate the soft tissues of merinos, thibets, and cashmeres, to which France owes "the splendor of the industries of combing-wool at Paris, Rheims, and Roubaix." Although our main dependence for raw material must always be upon our agriculture, it supplies but little more than three-fourths of our wants, and it is probable will never supply it wholly. Our farmers will probably never attempt to supply the cheap coarse wools which Egypt and South America furnish, nor will they soon abandon the lusty merinos for the small and delicate Saxons.* For our very coarse, and, for some time to come, for our very fine, and for our long wools, we must depend upon the foreign market. Our manufactures certainly cannot be extended unless we can be on some terms of equality with foreigners who have no restriction in the supply of raw materials; for all the principal

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 according to the Customs Tariffs of all nations, up to the year 1855:—

Great Britain						•				•			Free.
France (Tariff	of :	186	0)				•		•		•		n
Belgium	•		•			•	•	•		•		•	77
Zollverein, inc and 21 other													
Netherlands			•		•	•	•	•		•	•	•	"
Russia	•	•	•	•	•	•	•	•		•	•		20 copeks per pood or about 2 cents per pound.
Austria	•		•	•	•			•	•				2d. per centner (or 123½ lbs. avoirdupois.)
Spain	•	•	•	•	•	•	•	•	•	•	•		Common 35s. 5d. per 100 lbs.; Saxon, 23s. 9d. per 100 lbs.

has an equal number of sheep. But England feeds one sheep per acre, while France feeds only one-third of a head. The produce of the English sheep is double that of the French; and the average return of an English sheep-farm is six times greater than a French one.

The effect of this system upon manufactures is no less remarkable. The wool of England, without the knowledge or purpose of her farmers, has become a combing-wool; and the worsted manufacture, through the unconscious influence of English agriculture, has become developed to such an extent, that the towns of Yorkshire have grown up as marvellously as those of our great West.

The uses of the wool have changed. It was anciently employed principally for making says and serges,—grave stuffs for monks or mourners. It is now principally used for making light fancy fabrics for female apparel. Spencer describes envy as clad in a garment of this wool:—

"All in a kirtle of discolored eay,

He clothèd was y painted full of eies." †

The female of modern times, arrayed in the bright-colored textures of Bradford, may be likened to the Fidessa of Spencer in her outward aspect:—

"A goodly lady clad in scarlet red, Purfled with gold and pearls." ‡

I need not make the application of the lesson contained in these facts to our own country. We imported in 1860 \$15,000,000 of worsteds, principally from England. We made only \$3,000,000. To replace the English worsteds we have absolutely no raw material, and depend wholly upon the Leicester and Cotswold wools of Canada. Why should not the American, as well

Rural Economy of England, Scotland, and Ireland, by Leonce De Lavergne, translated from the French. Edinburgh and London, 1855, p. 27.

[†] The Faerie Queene, Book i. Canto iv.

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[§] The wool known in our markets as Canada wool consists wholly of fleeces from the long-wooled Leicester, Cotswold sheep, and crosses of these breeds with the South-

believed that a convention of delegates from the respective associations of wool-growers and manufacturers in this country would have the happiest effect upon the harmony of both interests, and might accomplish important practical results, not the least of which would be the adoption of a fixed terminology for the description and knowledge of wools in our own markets and farms.

The surest means of developing our industry rests with the manufacturer alone. It is for him perpetually to aspire to the utmost excellence in his products. I need not say that the manufacturer who suffers his goods to run down will inevitably bring down with them his credit and his fortune. I need not say that the trade-marks on your goods should be like the tower mark on old silver, the stamp of the true metal, or the marks on Swedish iron, recognized all over the world as infal-

was employed and happy in the pursuit of their beautiful industry. The Turkish Government was tempted, by British influence, to admit, free of duty, the products of European machinery, and to permit the export of the raw tiftik. This fatal step was the deathblow to the town of Angora. Instead of 1200, not more than fifty looms were employed; the retail merchants, weavers, hand-spinners, and dyers, were ruined, and the city, having at its command all the raw material for a most important and characteristic manufacture, offers, in its sad decline, another monument of the desolating influence of that system which would make the raw material of every country tributary to the one great workshop of the world. Nearly all the product of Angora wool is now exported to England, and is spun into yarns which are largely exported to France. They are used for the manufacture of Utrecht velvets, lace, braid, fine shawls, &c. Vigorous attempts have recently been made on the continent of Europe, especially in France, to acclimate this species; but nowhere have they succeeded as in the United States. The first importations of seven head were made about seventeen years ago by Dr. Davis, of South Carolina. About three hundred have been imported since. Their progeny, with crosses, is said by Mr. Diehl to number several thousand, scattered in flocks of from 12 to 300 hundred head, principally in the south-western States. A flock imported this season by Mr. Chenery, of Belmont, Mass., which I have examined, is in excellent condition. This flock numbered ten when it started, and fourteen upon arrival at Boston. They were driven 800 miles to Constantinople, and were seven months upon the voyage, but arrived in good health. The value of the wool in the market is now about \$1.25 per pound (not \$6 to \$8, as stated in the Agricultural Reports). The agent of the Abbott Worsted Manufacturing Co., Westford, Mass., informs me that he has similar machinery for spinning this wool to that used in the celebrated establishment of Titus Salt, of Bradford. - See article by Israel S. Diehl, U. S. Agricultural Report, 1863, p. 216. Southey on Colonial Wools, p. 322, et seq. Bulletin de la Société d'Acclimatation, t. v. p. 569.

lible seals of uniform excellence. The credit of your mills and the honor of your houses will be the most certain fortunes for vourselves and the best legacies to your sons. But it is not enough that you should be content to keep up the old standard of your goods. The highest attribute of humanity is the passion for perfection, the aspiration for some unattained ideal. The noblest men stamp these aspirations upon all their earnest works; they are then no longer workmen, traders; they become artists. Art is not found alone in painting and sculpture. It is the domain of Minerva, who gave the distaff, as well as of the Muses. The lover of art sees it in "the Stones of Venice," the iron scroll-work and armor of the middle ages, and in the old tapestries of Versailles, - in every work of man's hands which bears the impress of his soul. The sturdy honesty of the English clothiers of former times, and their workmanlike fidelity to the canons of their ancient guild, made the oldfashioned cloth of England as sound and solid as English oak. A higher sentiment, a passion, as it were, for an ideal fineness and nobility of fibre, incited the German flock-masters to create the unparalleled cloth wools which have given Silesia the crown of the "golden fleece." A passion for an ideal perfection of tissues inspires the master weavers and spinners of France in their perpetual strife to conquer new fields for her industrial glory. It impels them to add, each year, to the fineness and softness of their threads, and the perfection of their tissues, till their fabrics have become models which the spindles and looms of all other nations are content to simulate, but fail to imitate. All American industry needs to be vivified by such aspirations. Every earnest worker with such a purpose is a blessing to his country and race. As Mr. Ruskin said, in his art lecture to the manufacturers of Bradford, "If you resolve from the first, that, as far as you can ascertain what is best, you will produce what is best, on an intelligent consideration of the probable tendencies and possible tastes of the people whom

you supply, you may literally become more influential for all kinds of good than many lecturers on art, or many treatisewriters on morality." I will add: By such noble work you rise above the sphere of common labor; you become more than workmen, - more than artists, - you become creators, imitators, though humble, still worthy, of the great Worker, the infinite Maker. Indulge me a moment longer while I give you, in the eloquent words of a great teacher now passed away, the supreme example which is set for your labors.* "A thoughtful man for the first time goes to some carpet-mill in Lowell. He looks out of the window and sees dirty bales of wool lying confusedly about as they were dropped from the carts that brought them there. Close at hand is the Merrimac River, one end of it pressed against the New-Hampshire mountains and the sky far off, while the other crowds upon the milldam, and is going through its narrow gate. Under the factory it drives the huge wheel, whose turning keeps the whole town ajar all day. Above is the great bell which rings the river to Before him are pullies and shafts. its work. The floor is thick set with looms. There are rolls of various colored woollen yarns; bits of card, pierced with holes, hang before the weaver, who now pulls a handle, and the shuttles fly, wedding the woof to the expectant warp, and the handsome fabric is slowly woven up and rolled away. The thoughtful man wonders at the contrivance by which the Merrimac River is made to weave such coarse materials into such beauty of form and finish. What a marvel of machinery it is! None of the weavers quite understand it, - our visitor less. He goes off, wondering what a head it must be which made the mill a tool by which the Merrimac transfigures wool and dye-stuffs into handsome carpets, serviceable for chamber, parlor, staircase, or meeting-house."

"But, all day long, you and I, . . . and all the people in the

[•] Lessons from the World of Matter and the World of Man, by Theodore Parker Buston. 1865. p. 51.

world, are in a carpet-factory far more wonderful. What vast forces therein spin and weave continually! What is the Merrimac River, which only reaches from the New-Hampshire mountains to the sea, compared to that river of God, on whose breast the earth, the sun, the solar system, yea, the astral system, are but bubbles which gleam, many-colored, for a moment, or but dimple that stream, and which swiftly it whirls away? What is the fabric of a Lowell mill to that carpet which God lays on the floor of the earth from the Arctic Circle to the Antarctic, or yet also spreads on the bottom of the monstrous sea? It is trod under foot by all mankind. The elephant walks on it, and the royal tiger. What multitudes of sheep, swine, and horned cattle, lie down there and take their rest! What tribes of beasts, insects, reptiles, birds, fishes, make a home there, or feed thereon! Moths do not eat away this floor-cloth of the land and sea. The snow lies on it. The sun lurks there in summer, the rain wets it all the year: yet it never wears out; it is dyed in fast colors. Now and then the feet of armies in their battles wear a little hole in this green carpet; but next year a handsome piece of botanic rug-work covers up the wear and tear of Sebastopol and Delhi, as of old it repaired the waste of Marathon and Trasimenus. Look! and you see no weaver. no loom visible; but the web is always there on the ground and The same Clothier likewise keeps the live world tidy, and in good trim. How all the fishes are dressed out, --- those glittering in plate-armor, these only arrayed in their vari-colored jerkins, such as no Moorish artist could paint! How well-clad are the insects. With what suits of mail are beetle and bee and ant furnished. The coat of the buffalo never pinches under the arm, never puckers at the shoulder; it is always the same, yet never old fashioned, or out of date. . . . The pigeon and humming-bird wear their court-dress every day, and yet it never looks dusty nor threadbare. grand clothiery of the world, every thing is clad in more beauty

than many-colored Joseph or imperial Solomon ever put on, yet nobody sees the wheel, the loom, or the sewing machine of this great Dorcas institution, which carpets the earth and upholsters the heavens and clothes the people of the world with more glory than the Queen of Sheba ever saw in her dream of dress and love."

APPENDIX.

Secretary's Official Beport.

THE By-laws of the "National Association of Wool Manufacturers" make it the duty of the Secretary to prepare, under the direction of the government, an annual report of the transactions and condition of the Association. The following is submitted in conformity with this requirement:—

The want of some organization, capable of united and systematic action, having long been felt among those engaged in the woollen manufacture, a circular was addressed, on the tenth day of August, 1864, to those most directly interested in the matter. In response to this call, a large number of the leading wool manufacturers of the country, from Ohio, Pennsylvania, New York, New Jersey, Maryland, Delaware, and from each of the six New-England States, assembled in convention at Springfield, Mass., on the twelfth day of October, 1864. The Convention at that time resolved that it should proceed to the formation of a "National Association of Wool Manufacturers." To carry this resolution into effect, a committee was appointed to prepare a plan of organization, and report at an adjourned meeting of the Convention, to be held on the 30th of November following. The Convention having met on that day, and having been dissolved, the Association was organized by adopting Articles and By-laws which had been presented by the Committee, and by choosing officers as therein described. Meetings of the government, provided for in the By-laws, were successively held at Boston, Mass., on the twenty-first day of December, 1864; at New York, on the fifteenth day of March, 1865; at New York, on the seventeenth day of May, 1865; at Newport, R.I., on the twenty-sixth day of July, 1865; and at Philadelphia, on the 6th of September. These meetings were all numerously attended. At all of them interesting discussions took place upon questions relating to the interests of the Association. Committees were also appointed, having in charge the more important matters to be acted upon by the govern-By the direction of the government, a statement was prepared by the President of the "Objects and Plan" of the Association. This has been printed and extensively circulated. It was regarded by the government, that the first and most important duty of the Association was to obtain information of the actual condition of the woollen manufacture throughout the United States. With great labor, a list of all persons known or believed to be engaged in the woollen manufacture was prepared. Circulars containing such interrogatories as would draw forth the desired information were sent to all persons on this list, about 1,700 in all; 931 returns have been received, representing 4,073 sets of machinery, and returns are coming in daily. It is believed that by this means the Association will be in possession of complete and accurate statistics of the woollen machinery in operation in this country, the amount and description of wool consumed, and the quantity and character of goods manufactured, - information indispensable for wise and just legislation in matters affecting our interests. It is believed that no inquiries at present pursued by the national Government will furnish a basis for such legislation. It is the object of the government to place the Association upon such a basis that it shall have weight in our national councils, and that the interests of all the woollen manufacturers of the country shall be fully represented and cared for. The government believe that they have accomplished all that could have been expected in the few months of the existence of the Association, in completing its organization and arranging its machinery. They have not deemed it wise to attempt too much, or to make a display of their operations. The value of such an organization exists most in its silent and hardly appreciable influence; and time and patience are necessary to secure that which is really useful and permanent. The Association consists, at present, of 201 members; a number which, it is hoped, may be greatly increased when our "Objects and Plans" are more fully known.

Respectfully submitted,

JOHN L. HAYES,

Secretary.

TABLE,

Showing the Value of Woollen Goods manufactured in the United States, for the Year ending June 30, 1864. Calculated from Official Report of United-States Commissioner of Internal Revenue.

STATES.	Manufacturers of WOOL not otherwise pro- vided for.	Cloths, and all Textile, Knitted or Felted Fabrics of WOOL, before dyed, printed, or prepared in any other manner.	Manufacturers of WORSTED not otherwise pro- vided for.	TOTAL.
MAINE	Dollars. 3,238,098.67	Dollars. 238,385.00	Dollars.	Dollars. 3,476,488.67
NEW HAMPSHIRE	9,044,762.00	84,915.00		9,079,677.00
VERMONT	3,145,988.67	562,788.00		8,708,721.67
MASSACHUSETTS	38,905,399.00	800,531.33	897,720.67	40,603,651.00
RHODE ISLAND	2,963,154.33	7,668,531.67	261,014.88	10,892,700.33
CONNECTICUT	11,873,763.67	3,913,965.00	78,912.33	15,866,641.00
New York	10,850,180.00	2,214,802.67	912,792.88	13,977,775.00
New Jersey	2,752,652.00	25,361.67	70.83	2,778,084.00
PENNSYLVANIA	13,022,447.33	3,502,190.00	75,076.00	16,599,713.33
DELAWARE	548,134.67			548,134.67
MARYLAND	450,385.33	1,526.67		451,912.00
West Virginia	58,486.00	5,267.00		68,758.00
KENTUCKY	117,584.33	242,870.67		859,905.00
Missouri	72,980.00	2,364.00		75,844.00
0ню	1,315,243.00	85,634.67		1,400,877.67
INDIANA	545,128.33	11,794.33	1,692.67	558,615.33
ILLINOIS	841,907.00	11,884.00	5,793.88	859,084.33
Michigan	118,094.00	33,754.33		151,848.83
Wisconsin	104,457.67	860.00		105,817.67
Iowa	102,815.67	15,489.67		118,805.33
MINNESOTA	8,696.00	450.00		9,146.00
Kansas	14,947.67			14,947.67
CALIFORNIA	538,956.00			588,956.00
OREGON	128,620.67	567.5		128,620.67
NEBRASKA TERRITORY	45.67			45,67
				121,868,250.33

Report of the Proceedings

OF THE

1765.

CONVENTION, OF DELEGATES

PROM THE

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS, -

AND FROM THE SEVERAL ORGANIZATIONS

OF THE

WOOL GROWERS OF THE UNITED STATES, -

AT

SYRACUSE, NEW YORK,

DEC. 13, 1865.

BOSTON:

PRESS OF JOHN WILSON AND SONS. 1866.

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OFFICERS.

Bresident.

E. B. BIGELOW			•			•		•	Boston, Mass.
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T. S. FAXTON			٠.	•	•	•			UTICA, N.Y.
THEODORE POMEROY									PITTSFIELD, MASS.
SAMUEL BANCROFT.									MEDIA, PA.
		T	rea	su	er.				
WALTER HASTINGS.			•	•	•	•			BOSTON, MASS.
		g	ecr	eta	TV.				
JOHN L. HAYES									BOSTON, MASS.
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Cropper W. Derser	
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FRENCH & WARD	
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JESSE EDDY, & Son Fall River.	
F. B. RAY Franklin.	
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PLUNKETT WOOLLEN Co., C. J. Kittredye, Pres ,,	
AUGUST STEUSBERG	
D. D. CROMBIE Lawrence.	
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M. & S. Lapham	
HAMPDEN COTTON MANUF'G Co., C. W. Holmes, Ag't . Monson.	
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	. Ephratah.
	. Glenham.
	. Hudson.
	. Little Falls.
A. Van Sickler	. Madrid.
	. Marcellus.
	. Newburg.
J. Harrison	. "
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LITTLE & DANA	• "
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CAMPBELL & POLLOCK, Continental Woollen Mill ,

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REPORTS AND STATEMENTS

BELATIVE TO

WOOL AND WOOLENS.



Beport of the Proceedings

OF THE

CONVENTION, OF DELEGATES

17 33.

FROM THE

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS, -

AND FROM THE SEVERAL ORGANIZATIONS

· OF THE

WOOL GROWERS OF THE UNITED STATES,

AT

SYRACUSE, NEW YORK,

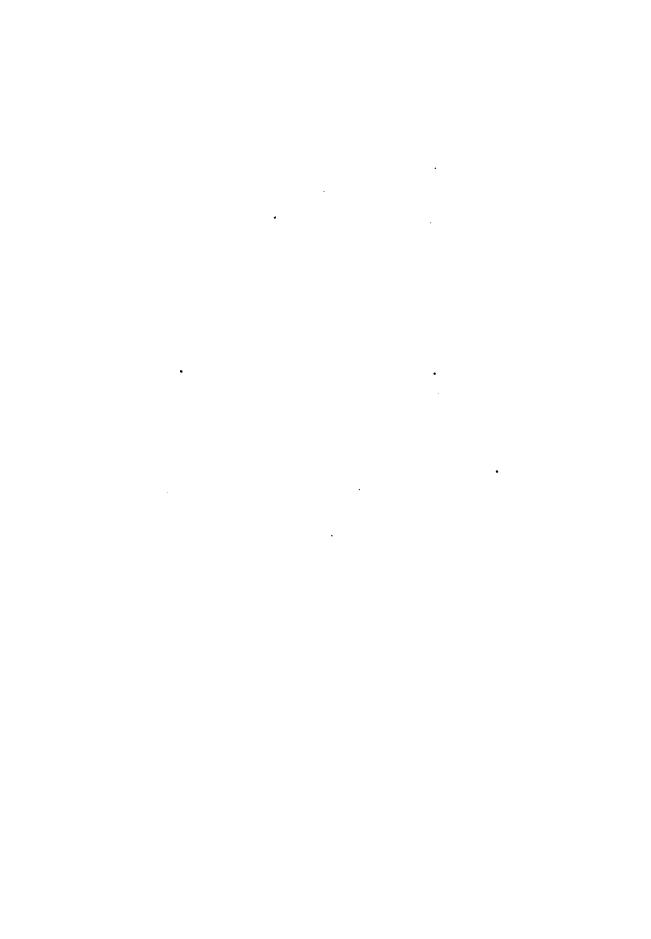
DEC. 13, 1865.

BOSTON:
PRESS OF JOHN WILSON AND SONS.
1866.

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THE following Report of the Proceedings of the Convention of the Wool Growers and Wool Manufacturers of the United States, prepared, under the supervision of the undersigned, from phonographic notes made with great fidelity by Mr. YERRINTON, of Boston, is commended to the attention of all interested in the two branches of industry represented. They will find the addresses and discussions replete with practical and original facts and suggestions; and, in the harmony of once distrustful, if not hostile interests, pledged by the resolutions and breathing through all the deliberations of the Convention, will receive the most hopeful assurance of the future stability and prosperity of the woollen interest of the United States.

JOHN L. HAYES, Secretaries of 8. D. HARRIS. She Convention.



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REPORT.

In accordance with the terms of a call issued by the Executive Committee of the National Association of Wool Manufacturers, a Convention of wool-growers and wool manufacturers was held in the city of Syracuse, New York, on Wednesday, December 13, at which the two interests were represented by delegates, as follows:—

National Association of Wool Manufacturers.

E. B. BIGELOW, Mass., President.
J. L. HAYER, Mass., Secretary.
JOSHUA STETSON, Massachusetts.
TREODORE POMEROY, Massachusetts.
A. C. RUSSELL, Massachusetts.
S. BLACKINTON, Massachusetts.
JESSE EDDY, Massachusetts.
JESSE EDDY, Massachusetts.
JOHN V. BARKER, Massachusetts.
T. S. FANTON, New York.

C. H. Adams, New York.
R. MIDDLETON, New York.
CHARLES STOTT, New York.
H. D. TELKAMPF, New York.
R. G. HAZARD, Rhode Island.
N. KIRGSBURY, Connecticut.
HOMER BLANCHARD, Connecticut.
GEORGE KELLOGG, Connecticut.
DAVID OAKES, New Jersey.
ALTON POPE, Ohio.

Wool-Growers' Associations.

NEW YORK.

HEMEY S. RANDALL, President.
GEORGE GEDDES.
E. B. POTTLE.
WILLIAM KELLY.
JAMES O. SHELDON.
WILLIAM CHAMBERLAIM.
SAMUEL THORME.
D. D. T. MOORE.
JAMES M. ELLIS.

A. F. WILCOX.
E. E. BROWN.
LIONEL SHERWOOD.
HENRY P. RANDALL.
WM. M. HOLMES.
DAVIS COSSIT.
JAMES GEDDES.
CHARLES TALLMAN.
ALLEN H. AVERY.
JOHN R. PAGE.

H. D. L. SWEET.
ADDISON H. CLAPP.
LUTHER BAKER.
SPENCEE BEARD.
CHARLES H. HIBBARD.
WILLIAM PLUMB.

VERMONT.

J. W. COLBURN, President.
EDWIN HAMMOND.
JOHN H. THOMAS.
HENEY BOYNTON.
HAMPDEN CUTTS.
WILLIAM R. SANFORD.
JOHN GREGORY.
GEORGE CAMPBELL.

OHIO.

R. M. MONTGOMERY, *President*. S. D. HARRIS. WM. F. GREER.

ILLIMOIS.

A. M. GARLAND, President.
JOHN MCCONNELL.
FRANKLIN FASSETT.
SAMUEL P. BOARDMAN.

WISCONSIN.

ELI STILLSON, President.
THOS. GOODHUE.

MEW-ENGLAND ASSOCIATION.

GEORGE B. LORING, President.
VICTOR WRIGHT.
DANIEL KIMBALL.
THOMAS SANDERS.
E. S. STOWELL.
HENRY CLARK.
JEREMIAH THORNTON.

The delegates assembled at the City Hall in Syracuse, on the morning of the above-named day, and were called to order, shortly after 10 o'clock, by Erastus B. Bigelow, Esq., President of the National Association of Wool Manufacturers, who read the call, as follows:—

NATIONAL ASSOCIATION OF WOOL-GROWERS,
Office, 55, Summer Street,
BOSTON, MASS., November 22, 1865.

- * SIR, I am directed by the government of the "National Association of Wool Manufacturers" to communicate to you the following copy of a resolve passed at their last meeting, and to respectfully invite your attendance at the meeting therein indicated:—
- "Resolved, That the Executive Committee of the National Association of Wool Manufacturers be instructed to invite the several organizations of wool-growers to meet at —, on of —, for the purpose of consultation in relation to their mutual interests, especially as to the representations to be given respecting the wool-producing and wool-manufacturing interests before the United States Tariff and Revenue Commission."

After consultation with representatives of the wool-growing interests present, the place and time of such meeting was fixed at Syracuse, N.Y., on the second Wednesday of December, 1865.

Permit me to express the earnest desire of the government of the National Association of Wool Manufacturers, that the wool-producing interests of the United States may be fully represented at the proposed conference, at which a full representation of wool manufacturers will be present. It is hoped, that, by a comparison of views at this meeting, the real identity of interests between the wool-growers and wool-manufacturers may be fully recognized and firmly established, and that they may hereafter go hand in hand in promoting one of the most important sources of the agricultural and manufacturing prosperity of the nation.

I have the honor to be, sir, very respectfully, your obedient servant,

(Signed,) JOHN L. HAYES, Secretary.

Addressed to Hon. HENRY S. RANDALL, President of the Association of Wool-Growers of the State of New York, and others.

Mr. Bigelow then said: "To carry out the objects of this meeting, it is necessary that it should be organized by the choice of the proper officers. With your permission, I will nominate, as the President of the Convention, the Honorable HENRY S. RANDALL of New York."

This nomination was unanimously confirmed by the Convention; and, on motion of General S. D. Harris, of Ohio, John L. Hayes, Esq., of Massachusetts, was appointed Secretary.

On motion of H. Blanchard, Esq., of Connecticut, General HARRIS was elected an additional Secretary.

The President then addressed the Convention as follows:—

GENTLEMEN OF THE CONVENTION, —I thank you for the honor you have done me in calling me to preside over your deliberations. This convention, or conference, will, I trust, mark the introduction of a new era in some of the important relations subsisting between two great industrial interests. The American wool-producers and manufacturers have entertained differences of opinion on the subject of the respective duties which should be imposed on imported raw and manufactured wool. Those differences have led to repeated and severe contests in Congress, in nominating conventions, and even at the polls. The whole history of our tariff legislation on this subject has been a history of sudden, and, occasionally, violent changes in measures, and even in policy. Having elsewhere attempted to trace the effects of

our different woollen tariffs on the two interests most directly involved, I will not repeat myself here. But I will call your attention to one great and significant fact which has been clearly established amidst all these struggles and changes. It is that when the government has protected the manufacturer at the expense of the producer, or the producer at the expense of the manufacturer, the injurious consequences have fallen not alone on the branch of industry discriminated against, but upon both. This was inevitable; for, in reality, their interests are indissolubly connected. Neither could possibly flourish without the other, under any circumstances which have occurred in our country, or which can reasonably be expected to occur for generations to come.

The producer must have a remunerative home market. It is in vain to suppose, that American farmers generally, on their comparatively small farms, and with their comparatively small capital, with the high duties of freemen and electors to discharge, with government to support, with public trusts to fill, with schoolhouses and churches to maintain, with children to educate for the future statesmen of our country, with those comfortable and respectable homes and easy modes of life to keep up, which should be made attainable to all the industrious citizens of a free republic, —it is in vain, I say, to suppose that such men can compete with the vastly cheaper labor and aggregated capital of various other countries in the production of any article, the price of which is so large in proportion to the cost of transportation as wool. On the other hand, the American manufacturer, without the home production of the raw material, would find it in the end more expensive, and at all times more difficult, if not actually impracticable, to obtain his full supply. And the same principle of free-trade which overthrew the producer, would, as a matter of course, extend to him; for it is not, and never can be, the policy of the American government so to legislate as to protect the manufacture of foreign staples to the exclusion of our own.

A United States Revenue Commission is now acting under the authority of Congress, in collecting facts in respect to the operation of those laws under which all our government revenues are collected. This looks toward a change in those laws, and among others in our tariff on wools and woollens, if such a change is found to be needed. The United States Revenue Commission to obtain the requisite information in regard to manufacturing, addressed inquiries to the National Association of Wool Manufacturers as the organ of that

interest. To obtain the statistics of wool production, it purposed addressing inquiries to the several State Wool-Growers' Associations, until it ascertained that this national convention of both interests was to be held. It then preferred to communicate with those State Associations collectively, through their representatives here assembled.

I have the direct authority of the United States Revenue Commission for saying, that it heard with pleasure that this Convention was to assemble; and it expressed the hope that the wool producers might have "a full representation both from the East and from the West." It would, no doubt, be highly gratified if the representatives of the two interests here assembled would concur in those representations which affect their common concerns, — such, for example, as the proportionable rate of duties which should be levied on unmanufactured and manufactured wools. If such a concurrence can be obtained, and on a basis which is a just and fair one to the consumer, it is reasonable to suppose that our action will have a strong influence both on the recommendations of the Revenue Commission and on the action of Congress.

It will not do for us, gentlemen, to overlook the interests of the consumer in our deliberations. As long as duties on foreign imports shall be collected for revenue purposes, all will concede that they should be so adjusted as to give incidental protection to those important branches of American industry which cannot flourish without such All civilized nations - not even excepting England under her so-called free-trade laws — acknowledge, and, to a greater or less extent, according to their several circumstances, practise upon this principle of political economy. But the amount of such protection should always be measured by the ultimate good of the whole, and not by that of the protected classes. No patriotic and intelligent people will complain of reasonable discriminations in those duties which they choose to raise for revenue purposes, which foster home industry, and thus render them independent of foreign nations. But they have a right to complain of the establishment of any system which bestows a monopoly, or any thing savoring of a monopoly, on a class or classes. And where such systems are imposed on a free people by their legislators, they are never slow to discover the fact. and to repeal such legislation.

Gentlemen, I have endeavored to state the preliminary object of this convention, though I take it for granted the occasion will not be lost to consider and take action on some other questions. I trust that our deliberations on all subjects will be characterized by a spirit of harmony, and by an earnest disposition to agree, though it should cost some concessions from both the interests here represented. By approaching every topic in this spirit, and with a willingness to listen to and weigh facts and arguments dispassionately and fairly before adopting conclusions, all differences may be happily adjusted, and at least they will be diminished and kept free from asperity.

We do not assemble as a convention under ordinary circumstances, where it would be proper to decide questions of importance by a majority of all the delegates present. The fact that we meet as the representatives of different interests, and without any limitation as to the number of delegates on either side, precludes that course. It has been agreed, therefore, that in cases where a divided vote is called for by delegates, the representatives of the producers and manufacturers shall vote separately, and it shall require a majority of each to make any action the action of the convention. In other respects, and until otherwise ordered, the ordinary parliamentary rules applicable to conventions will prevail.

At the request of the President, E. B. Bigelow, Esq., the President of the National Association of Wool Manufacturers took a place upon the platform, and addressed the convention as follows:—

This is the first time the wool producers and the wool manufacturers of the United States have ever assembled to consult in regard to matters affecting their common interests. Considering the interrelations of these two industries, it is not a little remarkable that such a movement should have been so long delayed.

The particular cause of our coming together at this time is an application of the United States Revenue Commission for such information as will enable them, in revising the revenue laws, to suitably adapt the customs duties and internal taxes to the woollen interest.

The war having ended, it seems not improbable that these questions will soon come again before the national legislature: indeed, we may infer this probability from the existence of the commission just mentioned.

Clearly it is a matter of vast importance, that whatever is done in this direction should be not only judicious in its character, but permanent in its action. If by well-considered co-operation, we should be enabled to promote in any degree an object so desirable, the result must contribute to the best interests of the country.

As more than seventy per centum of the wool required for our vast and varied manufactures is of home growth, the interdependence of domestic wool-growing and wool manufacturing becomes apparent. Neither one of these industries can long prosper, unless the other prospers also. Taken together, they constitute an interest scarcely second in importance to any of the great industries which promote the welfare of the people, and sustain the prosperity of the nation.

This great interest owes its present growth to national legislation, and is largely dependent on the same agency for its future success. Without the equalizing aid of discriminating customs duties, we can hold no successful competition with the accumulated capital and low wages of older countries. If the woollen interest of the United States is to continue to prosper, it must be maintained in a position to contend even-handed with the woollen interest of Germany, of France, and of Great Britain.

The only contest which can give success to our efforts, lies, not between ourselves as wool-growers and wool manufacturers, but between us and the wool-growers and wool manufacturers of other nations. This is a struggle that challenges our united forces, as between ourselves there is no real ground of antagonism. On the contrary, we are one in interest, and should be allied in purpose.

Scattered over the length and breadth of the land, as the woolgrowers and wool manufacturers are, and without any organized modes of intercourse, it is not surprising that misapprehension should have arisen in regard to their actual relations, and the means necessary for their common prosperity.

The want of some organization capable of united and systematic action, has long been felt among the wool manufacturers. To supply this deficiency, they recently formed a National Association, a leading object of which is the collection and diffusion of information on all those subjects in which they, as manufacturers, are particularly interested. Though this movement has thus far succeeded beyond their highest anticipations, they are not unmindful of the fact that all efforts to advance the interests of the wool manufacturers, which do not also embrace the interests of the wool producers, will lack an essential element of success.

Influenced by these considerations, and aided by your own counsel

and co-operation, Mr. President, the government of our Association, at a recent meeting in New-York city, instructed its executive committee to invite the several State organizations of wool-growers to meet them for consultation, in relation to interests which belong to them in common, and especially to consider what answer shall be made to the inquiries of the United States Revenue Commission, as regards the great wool-producing and wool-manufacturing industries.

While these, Mr. President and gentlemen, are the immediate objects of our meeting, and demand our first attention, there are other matters of common concern which will doubtless come before us, and in regard to which it is highly important that we should think and act harmoniously. Let us hope that this occasion is to form the auspicious commencement of an intercourse between the growers and the manufacturers of wool, which shall not only be agreeable and advantageous to themselves, but beneficial to all.

To this very desirable result, the formation of a national association among the wool-growers would greatly conduce, and I venture to express the hope that measures to that effect may soon be taken.

The "objects and plan" of our Association are fully set forth in a pamphlet printed by order of its government soon atter its organization. That our aims and motives may not be misunderstood, I beg to reproduce from the pamphlet just alluded to, the following paragraphs:—

"At the very outset, and with perfect sincerity, we disclaim the intention of assuming an attitude in any respect antagonistic to these great interests. It is, indeed, one leading object of our combination, that through it we may be enabled to work more understandingly, more harmoniously, more successfully with others, and especially with those whose pursuits are more or less connected with our own. We believe that there can be no greater mistake than to suppose, that any of the great industries of the country are opposed to each other, either in interest or policy. We trust that it will be an early, a constant, and a cherished object of the Association to promote harmony and co-operation among the different classes of American producers."...

"The opposition of interests, which has sometimes been thought to exist between men whose pursuits are different and yet allied,—as between those, for instance, who grow a raw material, and those who manipulate it,—is, I believe, always imaginary, and cannot fail to disappear under a careful consideration of principles and facts."...

"As our success in carrying out what is legitimate and practicable must depend somewhat on right understanding of what we can and what we cannot do, I may be permitted here to suggest, that this Association is not a combination among the manufacturers of a particular class, to fix the prices of their fabrics, or to control the markets. Probably there are very few among us who have thought so little on the great laws of trade, or who know so little of human nature, as not to see that any such attempt would bring confusion into business, and, in addition to the odium which it would devolve on its authors, would be ultimately injurious to their interests. Let us not forget, however, that there is a way in which the operations of our society may have a natural and a wholesome influence on the course of trade. Just so far as it shall aid in ascertaining the exact condition of the demand and the supply, and in keeping the producer constantly acquainted with the actual relations of those two important quantities, will it contribute to the normal and healthy adjustment of the same."

These are the sentiments, Mr. President, which have animated our Association from its commencement.

The response to our invitation, which is made, gentlemen, by your presence here to-day, is of the most gratifying character. It gives assurance, that, whatever may have been heretofore the attitude of those respectively engaged in the two industries here represented, they will henceforth move hand in hand in regard to all questions of practical interest and of national policy which affect their common prosperity.

Hon. R. G. HAZARD, of R. I., moved the appointment of a Business Committee, to propose topics of discussion for the Convention.

W. F. Greer, of Ohio. — Before that Committee is appointed, I think it would be highly proper, as there are several of the presiding officers of the State Associations here, that we should afford them an opportunity to express their views upon this question. For the purpose of carrying out this wish, I move that Dr. Geo. B. Loring, of Mass., the president of the New England Association of Wool-Growers, be invited to address the meeting upon the subject.

This motion was carried, and, in compliance with the invitation, Dr. Loring addressed the Convention. He said:—

MR. PRESIDENT AND GENTLEMEN, - When I accepted the invitation to be present at this Convention, it was intimated to me, that a part of my duty, as President of the New England Wool-Growers' Association, would be to present certain views of the interests and wishes of wool-growers generally, as I understand them, to the Convention. I was also requested to prepare myself, - always a safe request, and always a safe thing to be done by gentlemen who are placed in a prominent position over any body of their fellow-citizens, and especially in a time like this, when we are endeavoring to harmonize two great interests in this country. A careless word, dropped here accidentally, in unwritten debate, might awake an ill-feeling which hours would hardly dispel. I have, therefore, prepared myself, at the request of the distinguished gentleman who asked me to appear here; and I am exceedingly obliged to my friend from Ohio, who has given me an opportuity to present these views: and, more than all, I feel under obligation to the President of the National Association of Wool Manufacturers, for the tone which he has given this Convention. It must really be a source of infinite satisfaction to the great body of wool-growers in this country, who should be producing wool enough to supply all the spindles of the country, to know that the President of the National Association of Wool Manufacturers desires that they should derive all their raw material from United States soil; and I therefore, with the more pleasure, address the Convention. I may travel over more ground than some of you older gentlemen might deem necessary; but you must remember that some of us are yet young in this work, - speakers as well as hearers.

I suppose this Convention of wool manufacturers and wool-growers, has been called together for the purpose of devising some plan of governmental protection, which shall be of equal advantage to both of these great branches of industry. That both are entitled to protection, I think no man will deny. That either should be protected at the expense of the other, I think no fair practical man will claim. In order that we may approach some definite understanding of our necessities as farmers and manufacturers, and of our relations to each other, I propose to review briefly the wool trade and wool tariffs in this country and elsewhere for the last few years.

If we will turn our eyes abroad, we shall find that, in every instance where wool manufactures have flourished, it has been under the protecting arm of the government, shielding its citizens against foreign competition. From the days of Edward III. until now, England

has pursued this policy, and has fed and clothed and enriched her people, by covering her hills with flocks, and multiplying large manufacturing towns within her borders. For many centuries she made every thing subservient to that handicraft, upon whose success depended the development of the industrial power of her people, and the growth of her trade and commerce. France learned the same policy under the Great Napoleon. Austria, by duties almost prohibitory, has elevated herself into the front rank of manufacturing nations, supplying its own population, and exporting to every quarter of the globe, goods of the highest cost and most elaborate finish. Sweden owes almost her entire prosperity to her devotion to her manufacturing population. Russia has risen on the same policy, from a strictly agricultural nation, to a degree of manufacturing wealth and prosperity almost unparalleled, in the short period of half a century.

In our own country, we have the remarkable spectacle of an active, intelligent, and industrious people struggling against repeated financial convulsions and every variety of tariff policy, to develop an industry upon which much of our prosperity depends.

We have had the tariff of 1832, in which wool, valued at less than eight cents per lb., was imported free of duty, and all wool of higher value were protected by a duty of forty per cent and four cents per lb. At the same time, woollen manufactures, kerseys, &c., the value whereof shall not exceed thirty-five cents the square yard, cheap woollen goods, in short, required on the plantations of the South, for the manufacture of which our wools and labor were particularly adapted, were admitted at a duty of five per cent; high cost woollen goods, at a duty of fifty per cent. It is not difficult to understand this policy now. We understand now what it meant; and we should have understood what it meant then.

The tariff of 1842, imposing a duty of five per cent on all wool costing less than seven cents per lb., and thirty per cent and three cents per lb. on all wools costing over that sum, had hardly begun to manifest its beneficent influences, when a return to the old policy of sacrificing every interest to what were called the great producing sections of the country, when the destructive tariff of 1846 levelled wool and woollen goods alike, and reduced sheep and mills to a mere nominal value.

The tariff of 1857, which found our clip of wool, under the influence of those tariffs already mentioned, reduced from 52,500,000 lbs.

per year to less than 40,000,000 lbs., served to stimulate manufactures somewhat, and also found us very much at the mercy of foreign producers for our supply of raw material. From this tariff the American wool-grower could derive but little benefit; the foreign producer having almost the control of the market.

The tariff of 1861, with the addenda of 1862, 1863, 1864, and 1865, has somewhat established for the first time the true relations which should exist here between the producer and consumer, between the wool-grower and the wool manufacturer. Whatever may have been the cause of this manifest change in the policy of the government, the two great branches of industry, represented in this Convention, should consider it as the commencement of a firm and even prosperity for both.

This, I am confident, must and should be the policy of our country for the future. A recognition of the true relations which exist between the manufacturer of the East, and the wool-grower of the West and South, can alone give firmness and prosperity to each. It needs no elaborate argument to prove that the domestic market for American wool should be the best market. The same prosperity which has attended the growth of manufactures in other countries must attend their growth here. That great system of free-trade which exists between the States demands for the foundation of our domestic commerce an equal development of each section, and energy, activity, and success in each special branch of business. New York and Boston, the two great centres of manufactures, the two great wool markets of the country, offer facilities for trade, which can be found by us in no foreign port. Lowell and Lawrence, and all the manufacturing villages of the North, afford the American wool-grower his most convenient market. And it is upon the growth and vigor of this section, that the wool-producing sections of the United States must depend for their largest and most reliable, sure, and constant profits.

On the other hand, where can our mills look for the raw material, out of which to manufacture certain classes of goods, with more propriety and to better advantage than to our home production, so far as it goes. The styles of wool produced within the limits of the United States are adapted to those fabrics which we have succeeded thus far in manufacturing to the largest profit. And there is no reason why the American manufacturer should not patronize that territory included within the boundaries of his own government, by providing himself with the raw material from thence, and by availing himself,

in return, of that market for his manufactured goods, which is good in proportion to the sale it meets with, for its agricultural products.

When our great agricultural districts raise wool not for the domestic market, and our mills produce cloth not for home consumption, a blow will be struck at that great opportunity for even prosperity to all which is offered us by our free government, with its equalizing laws of trade between States and sections. One great source of our national strength consists in the diversity of our resources, and the extent of our territory. Never before has a people been found able to live within themselves, alike prosperous through the enjoyments of peace and the trials of war. And this power and strength we shall retain if we will but recognize the obligation which rests upon us to develop our various resources by mutual aid and dependence.

That the present system of protection is beneficial to the wool-grower and manufacturer, or has thus far been, is evident from the statistics of trade at the present time as compared with the past. In 1860 we produced 60,264,913 lbs. of wool. In 1864 we produced 80,000,000 lbs. And so far was this latter clip from supplying the manufacturers, that we imported 72,734,503 lbs.; nearly 70,000,000 lbs. of this were imported into Boston and New York alone; and a large portion for the manufacture of such goods as are suited to our common wants, the English and other long combing-wools constituting the smallest partion of the importation.

This increase has taken place, I am aware, during a period of war, in which there was an unprecedented demand for woollen goods, especially for those adapted to army use. But when we remember the vast amount of new industry which is brought into existence, the great territory which has been opened, the increasing markets which have been developed by the advent of peace, we may be assured that our manufactures have a future before them as encouraging as any period of the past. That they may derive the full benefit of the present state of affairs, the wool interest is entitled to the most encouraging and careful legislation. Such duties on manufactured goods as will remove all competition from foreign manufacturers; such duties on foreign wools as will encourage wool-growing here, - these we require from the fostering hand of our government. While I look forward to a supply of cotton from this country, which will not only furnish our own mills with raw material, but will also control the markets of Europe, and thus give America the command of the cotton trade, by the natural laws of production, I look to some protective measures to give our wool trade an equally powerful position in the commerce of the world. We can export cotton, — for we are without a rival in its growth. We ought not to import wool, — we cannot export it in competition with the cheap lands, cheap labor, and cheap living of our greatest foreign competitors. Our wool business is a home business, both as concerns its growth and manufacture. And we must make the home trade a prosperous one.

I am aware that there are those who will point to the policy of England, in her persistent and successful attempt to develop her wool industry, and remind me that she has protected her manufactures alone, and left her wool-growers to use the market thus created for them. I have not forgotten she has forbidden the exportation of wool, and has thus thrown the wool-grower entirely into the hands of the manufacturer. The export of sheep, even, was prohibited. Her own cloths were prescribed as the material adapted to the costume of many public occasions. She encouraged her manufactures in every possible way,—thus leading on and developing wool-growing, until her product reached nearly two hundred and fifty million pounds. When we remember the small extent of territory in which this large amount of wool is raised, we must admire the policy which has produced this wonderful result.

But England is not America. Her agricultural population, especially the laboring portion of it, constitutes by no means an influential part of the community. They expect a small reward for their toil, and they get it. They are not the largest consumers of the goods manufactured out of the raw material which they themselves produce. England possesses within herself but little diversity of climate, no great extent of territory, no domestic commerce, sufficient to support any large class of people, or to vitalize a great controlling interest. She draws her life from abroad, she returns to foreign markets the fruits of her labors, and she finds in them her chief means of subsistence. To establish in an empire like this a great patronizing and ruling class, the lords of the mill, the directors of one great branch of agriculture, the patrons upon whose decrees the success of a large class of dependents hangs, is a work comparatively easy in England. Not so here. The prosperity of the wool-grower should be built upon as firm a foundation as that of the manufacturer; and both should be as sure of a liberal reward for their labor, and a constant one too, as the chances and changes of business will allow.

In considering the claims of wool for protection in this country,

and at this time, we should not forget the effect which our financial condition has upon it, and upon manufactured goods. Our domestic industry is largely stimulated by an inflated and redundant currency. The prices of all commodities, whose value is controlled wholly by a home market, are unusually high. The price of gold as a recognized standard, the high price of labor, the prevailing spirit of speculation all combine to give a market value to our domestic manufactures, almost unprecedented. A high protective tariff, which secures to these manufacturers the full benefit of the home market, also enables the manufacturer to establish his own prices, free from the influence of exchange, or the fluctuations of gold.

None of these advantages does wool enjoy. The price of our domestic wools is established by the foreign market. Like all other articles of export and import, it has followed the price of gold, and has never reached a point corresponding to the rise of manufactured goods, or to the greatest inflations of the war. With Donskoi wool at twelve cents per pound, and Buenos Ayres at nine, and Cape, washed, at seventeen and a half in the English market, the American farmer stands a poor chance; even after reckoning the rates of exchange, and the small duty of three and six cents per pound which is laid upon such foreign wools. The American wool-grower, therefore, finds himself in the hands of the Philistines, not even raised to the dignity of fair competition with his own people, in the management of his portion of the wealth of the nation. It is a striking fact, that while, under the tariff of 1842, wool averaged forty-six cents per pound, under the tariff of 1861, it reached in 1868 only an average of seventy-four three-quarters, with all the pressure of gold, an active market for manufactured goods, and not a superfluous clip. The duties fixed on wool in 1864 were needed to give the wool-grower a proper remuneration at that time.

In addition to these difficulties, the wool-grower and the manufacturer are both laboring under that burden which always attends a disturbance of the currency. In a business like the wool business of this country, which in neither branch finds any outlet through the demands of a foreign market, or through our own power to export at a profit, it is exceedingly important to check importations, and to keep the market healthy and level. At present, however, the rates maintained by gold and currency offer every inducement to the importer, and neutralize that very tariff of fifty per cent which was laid upon imported woollen goods as a protection to the American manu-

facturer. At the same time that gold, as an article of merchandise, holds a position just fifty per cent in advance of the gold standard, almost all other merchandise finds another level, and is, in most instances, one hundred or two hundred per cent in advance of the same standard. All our manufactured goods, so far as my experience goes as a small consumer, and so far as I remember, are in this condition,—inflated by the currency, labor, the tariff, and speculation, to these high rates.

Mark the temptation which this state of affairs presents to the importer. He brings his goods into our inflated markets; sells them at the advances fixed here by our currency, one hundred or two hundred per cent higher than before the war; converts his currency received for his goods into gold, another article of merchandise, at fifty per cent advance only, — making a profit of fifty per cent, or one hundred and fifty per cent. He counts up his profits, examines his invoices, adds his expenses and the duties, and, with his gold in his pocket, returns to his work. And well he may return. For he finds that he has, by converting American currency into gold, wiped out the tariff of fifty per cent on manufactured woollen goods, and perhaps secured a profit of one hundred per cent on top of this.

While this state of things exists, the export of all articles raised in this country (with the exception of cotton and tobacco, which are in an abnormal condition on account of the war), such as corn, flour, wheat, provisions, is entirely prevented; for while these articles must be raised at currency prices, one hundred or one hundred and fifty per cent advance, they must be sold for gold abroad, convertible into currency at only fifty per cent advance. All this class of articles, productions of our agricultural industry, costing us one hundred and fifty per cent advance, when sold for gold and reconverted into currency, brings us but fifty per cent advance. Hence it is that flour, corn, wheat, and wool are relatively so low in the market. We produce gold as well as wheat and wool, and in the long-run the same law of trade applies to all productions.

I can conceive of a state of affairs in this country in which "duties on wool should be entirely abolished," with the certainty that our manufactures would thereby be so increased, that a great demand would be created for American wools, for the specific purposes to which they are adapted. But that state of affairs does not now exist. Before a paying demand for American wools can be created on such a basis as this, our currency must be restored to a sound basis, and

the markets of the world must be opened to our manufactured goods. Until that time arrives, let us hope that all will join in demanding a tariff of equal protection to the wool-grower and the manufacturer.

But it is not from the fluctuations of trade, and the irregular effects of tariffs alone, that the wool-grower has suffered. A sharp and somewhat bitter controversy has been carried on as to the breed of sheep best adapted to his wants, and the wool which he has produced has met with violent opposition. So far as breeds are concerned, the experience of a large portion of our farmers has taught them, that, in almost every section of the Union, both for mutton and wool, the Merino is the most valuable animal of this class, especially in the improved form to which he has been brought by the American breeder.

There is no doubt that a pound of the wool grown upon this animal is more cheaply produced than any other wool that can be grown here. Of its quality, I have only to quote the testimony of John L. Hayes, Esq., the efficient and accomplished Secretary of the National Association of Wool Manufacturers. In his elaborate and learned address to that Society, in September last, he says: "American Merino wool is fitted for fancy cassimeres, in which we excel; for fine shawls, in which we have attained great perfection; for mousselines de laine, which we have of great excellence, and which we owe to our American fleeces. The true value of the fleece of the American merino is for combing purposes, for which it has remarkable analogy with that of France. This country will never know the inestimable treasure which it has in its fleeces, until American manufacturers appropriate them to fabricate the soft tissues of merinoes, thibets, and cashmeres, to which France owes the splendor of the industries of combing-wool at Paris, Rheims, and Roubaix."

The process by which this wool has been developed, is one of those remarkable and sagacious efforts which man has often made, to secure the largest benefit from the domestic animal, accordant with the soil and climate to whose influences he is subjected. The production of the improved short-horn, the New-Leicester, Cotswold, and South-Down sheep, in England, and of the improved American merino on this continent, is a work of human skill, worthy of being classed with those great inventions by which mechanical forces have been brought to perfect submission and usefulness. The Spanish merino, on his arrival here, was an inferior animal, as regards size, shape of carcase, style of wool, and weight of fleece, when compared with that animal

now known in this country and in Europe as the Improved American Merino, a name as appropriate to him, notwithstanding his ancestry, as our national cognomen is to us who trace our descent from almost every "kindred, nation, and tongue under heaven." While the mutton sheep of England are unsuited to our climate and soil, and are neither adapted to the extensive grazing lands where flocks are fed, which are counted by the thousand, nor to the small farm which cannot furnish any luxuriance of food, the merino, as at present developed, seems to answer the want of all American farmers, large and small. In the size and shape of his carcase, it would be difficult to find his superior. Of that medium size which is best adapted to most of our pastures, and to our winter feeding, his form presents all those points of conformation which indicate a hardy, robust constitution, and great thrift. I have seen prize merino rams and ewes exhibited in New York and the New-England States, whose swelling outline on each side, from the ear to the tail, could not be surpassed in beauty by the finest ship that floats. In liveliness and elegance of expression, in strength of neck, in depth through the heart, in spring and swell of the rib, in straightness of back and width of hip, and depth of loin, and structure of limb, they are excelled by no existing breed of sheep. They are acknowledged by the most prudent and successful feeders to be the most profitable sheep for the stall; and they produce a quality of mutton which has been mistaken by the best judges for the farfamed South-Down. What a picture this, gentlemen, of that "little dirty runt of an animal, neither fit to raise wool, nor fit to eat!" as we have been told over and over again.

I have already alluded to the style of wool which these animals produce. From the fine, short clothing-wool produced by the original Spanish merinoes, with their light fleeces, there has been developed a long-staple combing-wool, measuring from two and a half to three and a half inches in length, devoid of the lustre of some English combing-wools, it is true, but strong, firm, lively to the very ends, and wasting in the card probably less than any wool known. This is the wool adapted to the fabrics enumerated by Mr. Hayes in the passage which I have quoted. It is readily grown from the hills of Vermont to the plains of Texas. It is kept up to the standard of the best quality with comparative ease. The weight of actual wool in each fleece of a flock is easily increased by judicious breeding, and without that excessive feeding which is required for an increase of long wools; and, when properly grown, it surpasses all other wools in the amount pro-

duced by each square inch of the animal upon which it is raised. It is profitable wool for the farmer to raise, and profitable for the manufacturer to work, if he will only establish a standard of quality, and purchase in relative proportion, as concerns prices.

We hear this wool abused on account of its weight. The wool which I have described is the highest quality of merino combing-wool, grown in heavy fleeces, in which yolk and oil are properly distributed, and which are protected on the ends by a sufficient supply of gum to keep it from being injured by the weather. These fleeces weigh from twelve to fifteen pounds from the ewes, and from twenty onward from the rams. Such fleeces are not raised without care; but they are isdicative of the capacity of the American merino as a wool-growing animal, and they are, when cleansed, the best wool of their kind to be found in the market.

There are heavy wools, so called, which shrink excessively, and which, when cleansed, furnish but little really good working material. But the wools to which I refer, shrink to something upon which the manufacturer can depend.

The true value of this wool is becoming more and more acknowledged. Disappointed breeders, and too many buyers, still continue to decry it; and the disparaging phrases, "grease and tar and dirt," are the common weapons now employed by those who flippantly abuse the millions of merinoes which are owned in the United States, and the system of breeding by which the profits of these flocks have been increased threefold.

Let not the wool-grower nor the manufacturer be alarmed by this talk. The American farmer, with his heavy taxation, his proper personal necessities, his care for the education of his family, and the maintenance of good institutions,—to which you have already alluded, sir,—and with the prices of labor and feeding generally, cannot afford to raise light fleeces. I mean by this, fleeces cleansing to two and a half and three pounds of wool. This may be done by nomads, by serfs, or by those who live on the confines of civilization, and in latitudes where sheep require but little shelter. But it cannot be profitably done in most sections of the United States. It is heavy fleeces, then, which our wool-growers want, and which will most benefit our manufactures. To produce these fleeces, the wool-grower must also produce a certain proportion of oil; and, up to a given point, the increase of wool may be measured by the increase of oil. It is not just, therefore, to charge upon the wool-growing community, that

they are dealing in "tar and dirt," while they can demonstrate that their growth of clean wool is increased by a proper attention to grease and yolk, and that the quality of the wool may be improved by this attention.

The skilful breeder knows this. If he has a flock of light-shearing sheep, he may not select a dry ram, with any hope of increasing the clip of his future flock. It is only by using a greasy ram that he can accomplish his object. And this is owing, not to the grease alone, but to the fact, that with a proper secretion of oil and yolk, usually go those other points which make a ram valuable, — such as firmness and thickness of fleece, uniformity of style over the whole body, complete covering of the whole surface, and that most attractive feature of a good sheep, a well-woolled head, and a clean, strong, expressive face. A dry-fleeced ram may possess these points, but it is seldom; and, if he does possess them, he can seldom transmit them.

The wool-grower must not be discouraged, then, in his production of heavy fleeces; for in this way, and in this only, can he increase his production of clean wool, and multiply the profits of his husbandry. This is known now throughout the United States.

I consider, therefore, that, -

- 1. The American improved merino is capable of producing more clean wool on a given surface of body, and with a given amount of food, than any other breed of sheep.
- 2. That American merino wool is peculiarly adapted to those fabrics which constitute the most profitable American manufactures.
- 3. That, to bring this wool to its highest degree of perfection, that system of breeding which has been adopted in developing the best of these sheep should be pursued by wool-growers generally.
- 4. That shrinkage is no loss to the wool-grower, inasmuch as with light fleeces he is engaged in raising the most expensive wool.

One word, now, with regard to the purchase and sale of American wool. Manufacturers must be aware that this business has been pursued without proper discrimination. The rule, that washed wool is washed wool, and unwashed wool is unwashed wool, has been followed with too little judgment. To shrink unwashed wool one-third in purchasing is considered a wise and proper precaution by purchasers generally, knowing, as they must, that it is often the washed wool upon which there is the greatest loss in manufacturing, and that unwashed wools do not shrink alike. The injustice arising from this custom is a mere incentive to fraud on the part of the wool-grower,

who resorts to every expedient by which he can sell the heaviest washed fleeces.

May we not, then, abandon the system of sheep-washing altogether? It is injurious to the sheep, fails to secure clean wool to the manufacturer, and complicates the business of buying and selling. An intelligent purchaser can judge, or ought to be able to judge, of the quality of the wool he is buying. If wool is presented to him uniformly as it was shorn without washing, he can exercise his judgment, and make his comparisons fairly. I believe that in this way the market for American wools can be equalized, and the comparative merits of Vermont, New-York, Ohio, and Texas wools would be thoroughly ascertained and fixed. I trust this Convention will take some combined and definite action on this point.

In the views which I have presented with regard to the relations which exist between the wool-grower and the manufacturer,—between the producing and manufacturing sections of our country,—I have endeavored to ascertain what is for our highest mutual interest. The wool business, in all its branches, should be a domestic trade. The market for woollen goods in this country is ample,—so ample that the foreign manufacturer finds many temptations here presented to him at the hands of the importer. Our interest should confine us at home, especially in a branch of trade in which we produce nothing to export, but are constantly compelled to supply ourselves by importation. Is it too much to expect that our great wool-growing districts will one day furnish us with an abundant supply of the raw material, and that our mills will fill our market with manufactured goods? I think not.

But not by controversy and contention and rivalry can this be done. We cannot bite and devour one another, and bring success to this great national industry, which is represented in all its branches in this Convention. Can it be expected, that the West, smarting under the impoverishment which follows a hard wool market for her, a market glutted with foreign wool, will be ready to protect the manufactures of the East from the competition of the importer? Can the East, whose mills are silenced by low tariffs, and the financial troubles to which I have alluded, bend her energies with good-will to the protection of American wools? Oh, no!—whatever may be the necessities of other branches of business, ours requires entire harmony of feeling, and reciprocal effort, between those two great sections where are found the producer and consumer.

And, more than all, may we not create through our business that bond of union which has once been broken by rivalry and bitterness of feeling, engendered by striving interests? That pestilent theory, that one section of our country was flourishing at the expense of the other, — what folly of nullification did it inflame? in what horrors of civil war did it end! I trust we shall not forget this. For we may, if we will, establish a policy of mutual benefit, whose prosperity shall be even and permanent, and which shall make manifest the social and civil elevation which may grow out of a just and fair distribution of the protection of government, and of the commercial energy of a people whose domestic trade is free and untrammelled.

The question was then put on the motion for the appointment of a Business Committee, and carried.

The Chair announced the Committee as follows: Rowland G. Hazard, of Rhode Island; Henry Clark, of Vermont; N. Kingsbury, of Connecticut; Samuel P. Boardman, of Illinois; J. M. McConnell, of Illinois; Theodore Pomeroy, of Massachusetts.

On motion of Mr. E. B. Pottle, of New York, a Committee on Resolutions was appointed by the Chair, consisting of one member from the New-England Society, one from each State Wool-Growers' Association, and an equal number from the Manufacturers' Association, as follows: E. B. Pottle, of New York; E. B. Bigelow, of Massachusetts; Edwin Hammond, of Vermont; T. S. Faxton, of New York; George Kellogg, of Connecticut; George B. Loring, of Massachusetts; A. Pope, of Ohio; R. M. Montgomery, of Ohio; J. Eddy, of Massachusetts; E. Stetson, of Wisconsin; David Oakes, of New Jersey; A. M. Garland, of Illinois.

The Convention then adjourned to two o'clock, P.M.

AFTERNOON SESSION.

The Convention met pursuant to adjournment, the President in the Chair. Mr. R. G. Hazard, of Rhode Island, from the Committee on Business, reported the following subjects for discussion:—

First, The tariff and internal revenue.

Second, The reciprocal and mutual interests of wool-growers and wool manufacturers.

Third, The marketable condition of wool best suited to promote the mutual interests of wool producers and manufacturers, including the one-third shrinkage rule.

Fourth, The wool best adapted to the various manufactures, especially that of worsted.

On motion of Mr. W. F. Greer, of Ohio, the report of the Committee was accepted.

Mr. J. W. COLBURN, of Vermont.—I would inquire if there is a copy of the present Tariff Bill here. If so, I would like to have that part of the bill which relates to wool and woollens read, so that we may understand what the tariff now is.

Mr. GEORGE GEDDES, of New York.—It seems to me that the first subject proposed by the Committee is rather one to be referred to a Committee to report upon. It would take, I have no doubt, all the time this Convention would be willing to devote to this whole business, to discuss that matter. A Committee might make a report upon it, but I cannot believe it is a very good topic for discussion here. I would suggest, therefore, that the President read the second proposition of the Business Committee.

The President.—I would remark, that, when the Committee on Resolutions report, they will probably present something tangible on the subject. These topics were laid before the meeting for general discussion, without particular action, merely to call out the views of the members present. It was supposed that perhaps it could be done a little better after the resolutions were brought in by the Committee; but still there is nothing to prevent any remarks that any member sees fit to make.

The second subject for discussion was then taken up, to wit, the reciprocal and mutual interests of wool-growers and wool manufacturers.

Mr. H. Currs, of Vermont. — I would like, sir, to make a few remarks, and perhaps I may as well make them upon that question as upon any other. I have not come here prepared with any written speech, nor have I been requested by any person to prepare myself; but still I hope, unprepared as I am, that I shall be able so to tame and temper

my remarks, that they shall not tend to disturb that harmony which I am very much pleased to see so far exists between the two interests, the wool producers and the wool manufacturers. I think that such harmony is very important. Their interests seem to me to be mutual; and, in some respects, dependent on each other. It is certain that it is necessary to the wool-grower that he should have a sure and permanent market for his product in his own country; and, in order to do that, it is necessary that the manufacturer should have success in his business, and be able to carry it on successfully and profitably. It is also for the interest of the manufacturer to be able to depend upon his own country for the raw material which he manufactures; that he shall not be at the mercy of foreigners in regard to his supply, but shall be sure to have it produced in his own country, if it can be. Any thing that should tend to make it unprofitable or unsafe for the wool-grower to raise wool, would be ultimately against the interest of the wool manufacturer; for that would tend to make wool scarce in this country, and consequently raise the price, and he would be obliged to pay the foreigner whatever he might ask for it. Now, I apprehend that the present state of things tends a little that way. I would like to have a free discussion of that subject, and every thing relating to it.

It seems to me, that the price of fine wool, as compared with the price of cloths manufactured from fine wool, is at present extremely low, and hardly remunerative to the producer. When we take into consideration the very high price of labor, and the increased tax which the wool-grower has to pay, it is certainly doubtful whether, with the present encouragement he has in its sale, he can go on and produce it in the quantity he has done. I think he cannot.

Now, sir, let us inquire to what this is owing. What is the cause of the present low price of wool? I do not pretend to be able to tell all the causes which have produced this effect, but I think I can point to some of them. One is the defective operation of the tariff. That, I believe, as has been suggested here, can be improved by avoiding certain frauds that are now perpetrated at the custom-house; and an excellent suggestion has been made, that we should have a committee to go to the custom-houses, and see how that tariff is carried out; and see whether the views of the Government are carried out or its laws evaded. It is my opinion that those laws are evaded. All ad valorem duties are extremely liable to be evaded. I am aware, and it is doubtless well known to all gentlemen here, that the British

Government, who have been remarkable for protecting their own industry, never succeeded in doing so until they took particular pains to have their views carried out at the custom-house, to prevent frauds there. To prevent these frauds, it is of great importance that we have specific duties rather than ad valorem duties. These ad valorem duties are easily evaded, because the foreign shippers can make such a valuation as they choose; and it is well known that they have two invoices, one giving the real cost, and the other made up (and sworn to, too) to be presented at the custom-house, for it is well known to the foreigner that a custom-house oath is to be bought very cheap. Therefore these duties amount to nothing; and, though we have specific duties, they are so low, that they amount to nothing. What is a duty of three cents a pound on wool, when we consider the price of labor here as compared with that abroad? It is a mere nothing. It is necessary, then, I think, that we should have a more efficient protection on wool than we now have, -higher duties, and those duties thoroughly and efficiently enforced.

Then the unsettled state of the currency of the country is another reason why wool is depressed. There is a feeling that the attempt may be made to resume specie payments; and this makes the manufacturer, as he should be, cautious in buying large quantities of the raw material. In consequence of that, I understand that it is now the fact, that instead of supplying himself with a year's stock, or six months', or even three months' stock, he buys from day to day, or from week to week. That leaves large amounts in the hands of the wool dealer, and, of course, has the effect to depress the price.

Well, sir, there is another thing that operates against the producer,—for I think this should be a free discussion, and we should not hesitate to say every thing we think is true in regard to the matter. I think there is another thing which has tended, and does now tend, to keep down the price of wool, and Vermont wool especially; and that is, the impression that Vermont wool shrinks more than any other wool. Now, I intend to put the blame of this where it belongs, if I can, and nowhere else. I believe the manufacturers are a great deal to blame in this matter. I believe they have not made sufficient discrimination in their purchases of wool, and that they must take the blame for encouraging the production of wool that shrinks very much, because they have paid as much, or nearly as much, for that as they would for wool that shrank but very little.

At this point Mr. Cutts gave way for the report of the Committee on Resolutions.

Mr. E. B. Pottle, of New York, Chairman of the Committee, said,—

It gives me great pleasure to say, that the series of resolutions which we shall report to this body have been agreed upon unanimously. Perfect harmony and unanimity have marked the proceedings of the Committee from beginning to end. The Committee report the following resolutions for the consideration of the Convention:—

"Resolved, That, of the great industries with which the people of the United States can occupy themselves to advantage, the woollen interest is especially commended for combining and developing in the highest degree the agricultural and mechanical resources of the nation.

"Resolved, That the mutuality of the interests of the wool producers and wool manufacturers of the United States is established by the closest of commercial bonds, — that of demand and supply; it having been demonstrated that the American grower supplies more than seventy per cent of all the wool consumed by American mills, and, with equal encouragement, would soon supply all which is properly adapted to production here; and, further, it is confirmed by the experience of half a century, that the periods of prosperity and depression in the two branches of woollen industry have been identical in time, and induced by the same general causes.

"Resolved, That as the two branches of agricultural and manufacturing industry represented by the woollen interest involve largely the labor of the country, whose productiveness is the basis of national prosperity, sound policy requires such legislative action as shall place them on an equal footing, and give them equal encouragement and protection in competing with the accumulated capital and low wages of other countries.

"Resolved, That the benefits of a truly national system, as applied to American industry, will be found in developing manufacturing and agricultural enterprise in all the States, thus furnishing markets at home for the products of both interests.

"Resolved, That it shall be the duty of the respective Executive Committees of the National Manufacturers' and National Wool-Growers' Associations to lay before the Revenue Commission and the appropriate Committee in Congress these resolutions, together

with such facts and statistics as shall be necessary to procure the legislation needed to put in practical operation the propositions therein set forth.

The report of the Committee was accepted.

Mr. Cutts then continued his remarks, as follows:—

When the Committee came in, Mr. President, I was remarking upon the necessity of the wool manufacturers making more appropriate discrimination in their purchases of wool than they have hitherto done. It is well known that they have not been very discriminating, but have paid as much, or nearly as much, for wool that shrunk excessively, as for that which shrunk very little. It seems to me that this must be against their interests. Many people for a long time stood out, and attempted to raise the best kinds of wool, and with the least shrinkage; but the manufacturers did not second their efforts, and many men undoubtedly have been driven into raising the very heaviest gross weight fleeces from this very action on the part of the woollen manufacturers; and but for that, perhaps, those sheep that now sell at such high prices in Vermont would not be considered the best. That is to say, but for that, sheep that would raise the most actual wool, at the least expense, might be considered the most valuable, and might sell at the highest price. Such is not the case, I imagine. But, whether it is or not, that matter will be tested by the practical test which is now coming into operation; and that is, the public shearings, in which the fleeces are weighed unwashed and unshrunk, and then the actual amount of wool is weighed, so that we shall know the quantity of wool raised from them.

Now, sir, I would suggest to the manufacturers, in all fairness, and respectfully, that perhaps they have been a little remiss in this particular, and that it will tend greatly to the promotion of harmony and good-feeling between the producers and manufacturers, if henceforth they will make more discrimination, and pay for wool more nearly what it is actually worth. It is in the power of the manufacturer to encourage the wool producer in this way as much as by the imposition of a tariff on foreign wool.

This morning, Mr. President, we heard some remarks upon the good feeling that should exist, from their community of interest, between the manufacturer and the producer; and I must say, that I coincide with most of them: but there were some few things that I could not well subscribe to. I have been engaged in the raising of

Spanish merino sheep some thirty years, and from that experience I suppose I would have a right to give an opinion; but, sir, it would be far from me to undertake to set up any particular method of breeding, and say that no one must attempt any other. It would be my mind that every breeder should consult his own judgment and his own free-will. In regard to breeding from Spanish merinoes, I have my own opinions, and, with due deference to all others, I would But I do not undertake to put down any other man's opinion. I do not come here at the request of any man, or any set of men, to be the champion of any particular kind of breed; and I would not undertake to cast any aspersions upon those who think differently from me. I was rather sorry at the tone with which my friend (Dr. Loring) spoke of this matter this morning. He spoke of what he called "the improved American merino." I understand from the tone of his remarks, that he means by "American merinoes" those sheep that produce what I will call the heaviest fleeces. Now, the question is, What is the heaviest fleece? Because, when you talk of a fleece, you should mean a fleece of wool. If you do mean wool, then that is the heaviest fleece that has the most wool in it; but if you mean that that is the heaviest fleece that contains the most weight, no matter what it consists of, that is another thing. The gentleman, as I understood him, described that class of sheep whose fleeces weigh the most in gross weight, and of course shrink the most, and have the smallest amount of actual wool in them, in proportion to their gross weight. Now, sir, I am not prepared to say that no one shall attempt to make an improvement on these sheep. I am willing to accord to the gentlemen who have raised this kind of sheep all the merit they deserve, - and they certainly deserve a great deal. If their object was to raise sheep that would sell for more money than any others, - and that was their object, I suppose, - they have succeeded. If it was their object to raise sheep that would yield the most wool in proportion to the cost, I am not sure that some one else may not be as successful in another mode. I think every one is at perfect liberty to make the attempt. If any man should think fit to undertake to improve still further upon these American merinoes by raising the weight of actual wool produced by them, he has a right to do so, without being subjected to any aspersions, and without being told that he ought not to raise light fleeces, and that he is a lighter man than those who raise heavy fleeces. I don't think it is becoming to make such remarks. I believe the heaviest fleeces from these American merinoes are, in gross weight, from rams, twenty-five to thirty pounds; from ewes, ten to fifteen pounds. Well, out of those rams' fleeces that weigh from twenty-five to thirty pounds, the most cleansed wool that has been got has been some seven or eight pounds. Now, suppose some one else should take it into his head, wisely or unwisely I don't care, to raise sheep that, instead of yielding fleeces weighing twenty-five or thirty pounds, won't go up above fifteen or twenty pounds, and yet, when cleansed, will yield a little more actual wool than the other, which would be the best sheep?

Mr. E. B. POTTLE, of N.Y. — Mr. President, I rise to a point of order. I call for the reading of the subject under discussion. There must be a limit to this kind of debate. We are not sitting here for the purpose of deciding the merits of the different breeds of sheep raised in Vermont. We have come here for a specific purpose; and, however much I should be gratified in listening to the remarks of the gentleman from Vermont on another occasion, — and I certainly should be very much gratified, — I cannot think they are pertinent to the object of this Convention. If there is any thing in the questions submitted by the Committee which justifies the debate, I have no objection to its going on; but, if not, I raise the point of order.

The PRESIDENT.—The gentleman had commenced speaking on the report of the Business Committee, before the other committee entered the room. I confess I am not particularly acquainted with parliamentary rules; and I am not prepared instantaneously to decide whether their bringing in that report cuts him off or not from finishing the remarks which he commenced to make on the report of the Business Committee, when he was undoubtedly in order. I would prefer, myself, to waive the question, and allow the gentleman to proceed; leaving it to his magnanimity and sense of propriety how far he shall carry the debate outside of the resolutions. Please to proceed, sir.

Mr. Currs. — It is far from me, sir, to attempt to carry the debate outside of the limits of legitimate discussion. I have had no idea of doing so, and it does not seem to me that I have; and I certainly shall try to avoid it.

I was remarking, I think, that we should, in my opinion, have liberty, as breeders, to breed very much as we think judicious; and I would say, in addition to that, that it seems to me, that, if such a breed of sheep as that to which I have alluded should be raised, it would

have a good effect, not only on the interests of the wool-grower, but of the manufacturer, inasmuch as he would not have to purchase so much that is of no advantage to him.

There is another remark that I was going to make, which I hope no gentleman will think is without the legitimate pale of discussion; and that is, that it is my opinion, as a breeder of some thirty years' experience, that no species of merino ram ever produced more than twenty pounds gross weight of fleece, without excessive feeding or excessive housing; and ewes not over ten or twelve pounds, without unnecessary feeding or unnecessary housing. That being the case, sir (and I express it as my opinion; I don't wish any other man to be converted to it; I say so because I think so), it seems to me more advisable to raise such sheep as can be raised without any unnecessary treatment of that sort. They would yield more wool, and be of more benefit to the manufacturer, and more benefit to the wool-grower, if wool-growing is the legitimate business of the wool-grower; and I take it to be so, and nothing else.

I think, therefore, there may be something still better than the American merino; and while I would give unbounded credit to the man who has made any improvement upon the Spanish merino sheep, as it came to this country, I am not sure that a man might not today, if he could find what he was sure was a full-blooded merino, put the improvements upon that sheep himself at much less expense than it would cost to procure one that has been already improved.

I make these remarks from my impressions after thirty years' experience. The gentleman who spoke this morning has not had so much; and yet his superior subtlety and ability to penetrate into the causes of things may enable him to have more information upon the subject than I have; and yet I think I have a right to this opinion. If, sir, I have gone, in these remarks, one step beyond the line of legitimate debate, I hope I shall not be treated as our poor prisoners were when they crossed the "dead line."

Dr. George B. Loring, of Massachusetts.—I do not wish to take up the time of the Convention, except in a proper and legitimate way. I can conceive, that the remarks of the gentleman from Vermont, as applied to the question as to the relation which exists between the wool-grower and the wool manufacturer, were appropriate on his side of that question; and, when it comes again before the Convention,—as I understand it is now upon the table, pending action upon the resolutions,—I should like to have an opportunity to reply.

The President. — The question is now upon the resolutions. We will dispose of them first.

Mr. Colbum, of Vermont. — I move their adoption.

Mr. GEORGE GEDDES, of New York. - Mr. President, It is said in these resolutions, that we furnish seventy per cent of the wool manufactured in this country. Now, the fact that we do not furnish all that is manufactured, proves that there is some lack of inducement to do it; because, if there had been sufficient inducement, we should have furnished, all along, all the manufacturer desired. Now, sir, let me call the attention of this body to the present state of things. Before the war which has lately closed, wool was higher in gold than it is now. I speak from my own personal knowledge. I, and my son after me, sold our wools steadily, for eight years in succession previous to the war, for never less than fifty cents a pound; and at no time since the repression of specie payments have we been able to get fifty cents in gold, although I am quite sure our wool has improved very much in quality and condition. Now, sir, the manufacturer of cheese has been able to get a great deal more gold for his product; the raiser of grain, in general, has been able to get more. The consequence is inevitable, that there is less encouragement for the production of wool than for the production of other farm produce. Farmers are a long-enduring people. It is a fact, that women made butter for a shilling a pound for generations, and thought it was a pretty fair price; but there sits a man at the head of that table [X. A. Willard, Esq.], who has proved that the milk to make a pound of butter must have cost all these women got for the butter. I mention this to show how cheap farmers are willing to work. And now, if it was true that we could not make more money, or could not live better by the production of other things than by growing wool, we should grow more wool. The price of meat is inordinately high. Ordinary beef is selling in this market for \$11 a hundred, by the side. That is more gold, a great deal, than we got for beef before the war. Now, sir, we shall surely cut our sheeps' throats unless we can get more money for the wool. I say this to these manufacturers. I feel that somebody should say it. I have on my farm - or rather my son has - a flock of sheep that are pets of mine. All my active life has been devoted to their improvement. I have held on tenaciously to those sheep. But, sir, it is demonstrable, that if my son had, last fall, cut the throats of every one of them, and flung them into the manure heap, his hay and straw and corn-stalks would have brought

more money in the market than their wool and carcasses would bring to-day.

Now, sir, what is the remedy of the farmer, when he finds himself in this condition? It is to give his sheep a bushel of corn apiece, and in sixty days they are fit for the butcher's knife. That is his remedy. It would be most disastrous to the great economical interests of this country if this should be done; for you cannot afford to strike out of existence these fine flocks. I lay it down as a principle, Mr. Chairman, that fine sheep are to be produced in all the country east of the Mississippi River, in connection with the raising of grain. They fit in exceedingly well with a crop of grain. They consume the straw, the corn-stalks, and the refuse fodder that come from the grain crop. They work in exceedingly well with it; but if they work in at a loss, as present prices show, then they won't work in a great while.

Now, I don't say that the manufacturers are to blame that this thing is so. I don't believe they are to blame. I recognize the common interest in this matter perfectly. As a producer of wool, I recognize that I am a partner with my friend Faxton, at Utica, who makes it up. But my part of the labor and his part of the labor are distinct; and it is the common nature of man, when he comes to me to trade, that he shall buy my wool as cheap as he can, and I shall get as much as I can if I sell it to him; and if this Government will permit him to go to Buenos Ayres, and buy his wool at a lower rate than I can afford to sell it, he won't buy much of me, unless I sell it at a loss. Now, that is exactly where we stand to-day. We have got scattered through the State of New York some inestimable flocks of sheep. We shall take them to the shambles. No property is converted into money quicker than they are. Six weeks turn an ordinary conditioned merino sheep into good mutton. A pound of corn a day will do it. I don't say I shall advise this to be done in our own Why? Because, when a man has been almost forty years doing a thing, - devoted his life to it, and travelled far and near to learn a little about it, - it is hard for him to give up and say, "I have been at work all my life for nought." I would rather live on, in hopes that some change will take place for the better. But how many men, who have flocks of forty, fifty, or a hundred sheep, will reason in this way: "I will hold on to these sheep; Congress will put a tariff on wool; we shall get a fair price for it; and all the wool will be raised in this country that is manufactured here, and a great

deal more will be manufactured, for we ought to manufacture all the cloth that we wear out"? If we could not do better at any other business than we can at raising wool, we should do it now; but, I say, the fact looms up that we can do better, and that the great mass of wool-growers will do better.

New, feeling, as I have no doubt you gentlemen of the manufacturing interest do, that you must have us raise wool,—that it won't do for us to stop raising wool,—here is an inducement for you to help us get a tariff on wool. And that is the whole point of my argument. If I have said any thing, it has been to try to reach you, gentlemen, through your pockets, and make you understand that you really had better help us. There is no mistake about it.

Now, Mr. President, indulge me in saying that what I believe is fair in this matter is this, - that we should have such protection on our wool as the manufacturer has on his part of the labor. To illustrate: If a yard of cloth laid down here is worth two dollars, and it took one dollar's worth of wool to make it, and one dollar's worth of labor to make it, - if the wool came from a foreign country, - let that dollar's worth of wool that is in it pay just as much duty as the dollar's worth of labor that is in it is protected by the duty on foreign cloth. That is fair. And, when I say I think it is fair, I say it with this meaning, that, when our committee go before these gentlemen who are to propose amendments to the Tariff Law, you manufacturers shall not be sharp, and try to get an act framed that shall give us the appearance of protection, but shall have holes through it big enough to drive a four-horse wagon-load of wool through. Let us meet on this common footing, that, if we work a dollar's worth, it ought to have the same protection that you have when you work a dollar's worth, remembering that this vast debt upon this country is to be paid. We are here the representatives of the producing interests. We are the producers. Where does wealth come from, sir? Why, sir, the labor of man and the fruits of the soil make the whole ability of a nation to pay its debt. We will meet our share of this debt - I speak for the farmer - with perfect willingness; but we ask, that, in order that we may do it, we be put upon an equal whiffletree with all other interests. Having used that word, it occurs to me that right here is the simile. If I was a legislator of this country, and saw that there was not a sufficient quantity of wool produced to supply the manufacturer, I would say, "That end ought to come up;" and I would induce that end to come up. I would even that

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whiffletree. And, when I found there was more wool produced than the manufacturers would manufacture, I would say, "I will bring up that end." In legislating on this subject, I would look precisely to this end,—that this country should produce all the wool that it wanted.

I don't know but I have said too much, and talked too long; but I have just given the views and feelings of a farmer.

Mr. George W. Bond, of Massachusetts. - I rise to correct a statement of the gentleman last up. What he has said in regard to the price of wool, since the war, may be his own experience; but it does not apply to wool generally. The Secretary of the Treasury, in his "Report on the State of Finances for 1863," table 39, showed the range of prices in New York, for various articles, for thirty-nine years. From that, sir, the following extract was made, to show the comparative prices between the year 1860, before the war, and 1863, after the war. The average advance on gold was 45 per cent for the year 1863. The average advance on wheat flour was 111 per cent on the gold price; on corn, 20 per cent; on mess beef, 34 per cent; on butter, 15% per cent; on cheese, 44% per cent; on common wool, 81 per cent; and on merino wool, 51 per cent, — thus showing, that, with the single exception of common wool, merino wool paid at that time a higher advance than any of these prominent articles of farming products. It is not stated here; but the single article of oats - which, like common wool, was an article of army consumption — advanced 80 per cent and a fraction. common wool bore about the same advance.

At that time, an effort was made to put a duty upon wool; and I think I can explain satisfactorily to you, sir, and the people present, why no advanced price has been realized by farmers; for since that time, it is true, they have not received so high a price for their wool as they did previously. The movement for a high tariff on wool stimulated importations to an immense extent, as you will see by the tables of imports; so that, in the year immediately following, we imported 75,000,000 pounds of wool, the importers being anxious to get it in here prior to the time when the new duty, which it was evident must be put upon it, should be imposed. Most of that wool arrived in season: a very considerable quantity of it, however, arrived after the first of July, and went into the bonded warehouses. The bare cost of importing Cape wool, with the expenses then bearing upon it, was about twenty-three cents, gold. The average sale of Cape wool, the

first six months of 1864, with a duty of five per cent upon it, was 24.60 cents. The average price for the six months after July, when the new tariff went into operation (the bulk of the wool being held in bond for a long while, and gradually sold out), was about $24\frac{38}{100}$, or a little less than it brought before the duty was increased, because the market had been fully stocked in anticipation of the duty. The consequence was, that American wool had to bear it pro rata with the other. The large importations, caused by the anticipation of the duty, overstocked the market; and wool manufacturers and wool-growers must find themselves ever amenable to the laws of trade. It is simply to those laws that the fact is due, that not one cent has been added to the price of wool in this country in consequence of the added duty, which is equivalent to ten cents a pound on domestic washed wool. Since that time, domestic wool has not averaged more for gold than it did before; the best clips bringing only about seventy cents, which has been equivalent to about fifty cents in gold.

Mr. R. G. HAZARD. — After the clear and able statement which has just been made by my friend, I do not propose to detain this Convention more than a moment upon a similar point.

It so happened that I argued the case of the manufacturers before the Committee of Ways and Means, when the subject of a revision of the tariff was last considered by them. During that discussion, the question arose, one evening, as to whether wool had not risen as much or more than other agricultural articles. The next morning I went to the statistics at the Treasury Department; and I will read a portion of the argument that I addressed to the Committee immediately afterwards:—

"With regard to the advance on wool, I find, from the official tables, that the average price of sheep washed fleece wool for seventeen years (1843 to 1859 inclusive) was 35½ cents per pound, and that in 1863 it was 71 cents per pound, or just 100 per cent advance. That of five other agricultural products taken at random,—viz., wheat, corn, mess beef, butter, and cheese,—the average advance in 1863 over the average prices of the same seventeen years was only 20½ per cent. But there is another element of advance in domestic fleece wool not taken into account in the tables. At the middle period of the seventeen years, the average loss in scouring good medium wool was 35 per cent, and in 1863 this loss had increased to 44 per cent in the same class of wool; so that, during the average period from 1843 to 1859, the growers sold, on an average, 65 pounds of clean wool for \$35, and in 1863 sold an average of 56 pounds for \$71,—making the cost of scoured wool in the former period 55 cents per pound, and, in 1863, 127

cents per pound: and hence the real advance in price, after eliminating the element of grease and dirt, was over 130 per cent against 20½ per cent average on five other great agricultural staples; and, since 1864, there has been a further advance in these wools of 10 per cent."

Mr. Geddes. — Now, Mr. Chairman, these figures make a very imposing array, and, I have no doubt, are entirely convincing to most of this body; but here stands with me the stubborn fact, that for months and months we have offered in this market a ton of wool at fifty cents a pound in gold, and could not get it, when we used to get it for years before the war. That stubborn fact stands right out.

Mr. Colburn, of Vermont. — I have moved the adoption of these resolutions as a whole, because I think they breathe the spirit of good-will and harmony between the wool-grower and manufacturer. There is the word "equality" there, which I rely upon vastly. The manufacturer has said, in these resolutions, that he is perfectly willing the wool-grower should be protected equally with him; and that is all we ask. Now, sir, if the manufacturers are ready to carry that out, I am sure they will find the wool-growers ready to come in and act with them; but, if they undertake to tell us that we now stand upon an equality with them, it will be up-hill business for them to make us believe it. In the town where I reside, which is eminently a wool-growing town, there is now more wool than was clipped there this year. We have to pay pretty dear there for our labor. Thirty dollars a month for the season; two dollars a day, if we hire by the day; two dollars and a half and three dollars during haying; and we cannot grow wool, as my friend Mr. Geddes says, at present prices, and live by it: it is totally impossible. However these other agricultural articles that have been referred to have paid in 1864, or some time ago, they are now paying vastly beyond wool. Butter, cheese, pork, beef, - every thing is paying vastly beyond wool.

Well, sir, as I said before, we would like an equality of protection with the manufacturers of wool: have we got it now? I don't know that I understand exactly what the provisions of the tariff are now; but I have learned one fact from a New-York merchant, since I came here, that speaks volumes. He says that the duties on the quantity of Buenos-Ayres wool which will make a yard of cloth are ten and a half cents; while the duties on a yard of foreign cloth, manufactured from precisely that kind of wool, are fifty-five and a half cents. There is a difference of forty-five cents betwixt the wool that goes into that cloth manufactured here and the foreign article. What kind of equality is

that, sir? Well, sir, it is a kind of equality that the wool-growers can't stand, any way.

Now, I don't blame the manufacturers for all this. Human nature is human nature, the world over. If they can get a tariff playing into their hands in this way, without any effort on their part, it is natural they should take it. They will buy their wool where they can buy the cheapest; and we would do the same, were we manufacturers. They are not to blame for it; but the American wool-growers have been to blame, for they have never attended to their own interests, when there was to be revision of the tariff. And the reason is obvious. They are scattered all over God's creation, you might say: a great many of them are small growers, and they don't want to be taxed to send a delegation to Washington to attend to their interests; and so the thing has gone on as it has. It is perfectly natural that the manufacturers — and they are the smartest men in the United States — should look to their own interests when there is to be a revision of the tariff; it is not natural that they should look to the interests of the wool-grower, or feel very tender as to the amount of benefit the wool-grower was to receive. They look to their own interests; and we have suffered because we have not attended to our own interests, and had nobody to do it for us.

Well, now we are here to try the experiment, for the first time, of bringing the wool-growers and manufacturers together, to see if they cannot make their interest mutual; and I really hope we shall succeed, after all. I have had some little doubt about it; but I feel stronger since these resolutions have come in, and have conceded equality.

It is a fact that we imported about a third part of the wool worked up last year. Now, why was that so? It was either because there was not wool enough grown in this country, or because the manufacturers could buy it cheaper of the foreigner. I believe that the last reason was the predominant one. They bought more wool of the foreigner because they could buy it cheaper than at home, than because it was not to be had here. Now, I believe it would be a grand thing if we could go on hand in hand, and get an amount of protection in this country, both for wool and woollens, that would become gradually, say in ten years, totally prohibitory. Let us clothe ourselves as well as feed ourselves. We can do it. If I were a member of Congress, I would exert what little influence I could get there to make a tariff that should become, in the end, entirely prohibitory upon wools of all kinds and woollen goods.

Some will say, "Then you are going to oppress the poor. You are

going to make clothing so dear that the poor man cannot clothe his family at all." Well, that string has been harped upon in this country, for political purposes, a good many years. Oppress the poor man! When the Government is ready to give him one hundred and ten acres of land if he can pay ten dollars, if he finds that he can't get sufficient wages to support his family, won't he take up that land, and become a farmer? It is all moonshine to talk about oppressing the poor in this country! There is no country on the face of God's earth where the people are so well off as in this country. We cannot oppress the poor by a high tariff, or any thing of the kind.

I do not wish, sir, to say a great deal on this subject; but I do hope we shall go along in good faith, --- we, the wool-growers and wool manufacturers, - and get this equal protection. I am from the State that Mr. Morrill represents, and I had a talk with him about the tariff of 1857. I told him that tariff did not afford sufficient protection to the wool-grower. "Well," said he, "blame yourselves for it. Why didn't you get your statistics, and come to Washington and show them to us? The manufacturers were there in their strength. They showed us these things, and they had their influence there; and you woolgrowers ought to have been there." That is a fact. Mr. Morrill is an honest man; he means to do right, and means to treat all interests justly; but he was mistaken in getting up that tariff. understand the interests of the wool-grower. I think he is disposed to try to understand them; and, as he is now at the head of the Committee of Ways and Means, it is of the highest importance that we make him understand them, so that, if we get a revision of this tariff, we may get something that will approximate, at least, to equality.

We have had a tariff where the wool-grower was equally protected with the manufacturer. I think the tariff of 1828 gave the wool-grower equal protection with the manufacturer. I think the tariff of 1846, miserable as it was for both interests, protected the wool-grower equally with the manufacturer. But, generally speaking, all these tariffs have been one-sided things; they have operated vastly more to protect the manufacturer than the wool-grower. Still, the manufacturers seem to think,—at least, they claim,—that, if they can be sufficiently protected, the wool-grower certainly must be; that the protection extended to them will reach, through them, to the wool-grower. Well, there is something in that. If you can make manufactures flourish in this country, the manufacturers will be the more ready to buy wool, and they must pay whatever the market value is.

But, if they can buy it threepence a pound cheaper of the foreigner, they certainly will buy it of him; and we cannot blame them for it. If we can put on a duty that will prevent importations, it is certain that we can grow all that is required here. We can grow any amount here, if we can only have the business remunerative. There is no doubt upon that subject.

Mr. Geo. W. Bond, of Massachusetts. — The impression may have been taken, from what I have said, that the wool-growers were to read no benefit from the increased duty on wool. I said that, under the laws of trade, they were reading the results of over-importation. The imports have fallen off about forty per cent this year. These importations resulted in a severe loss.

Mr. GEDDES. - And our prices falling!

Mr. Bond.—Yes, sir; because, under the pressure caused by the anticipation of a high tariff to come, enough wool was imported to supply the market a long while ahead. The wool that is to be imported now will only come in case it will pay its cost, with the duties added. Consequently you will reap the benefit of the advanced duty over and above the cost abroad; though that cost will be affected somewhat by the value here, and by the withdrawal of American competition in the foreign producing markets.

Mr. R. M. MONTGOMERY, of Ohio. - With all due deference to the gentlemen who have spoken on this subject, and with all due diffidence in regard to my own ability, I wish to say to you, sir, and to this Convention, that I am fearful this debate is taking an unprofitable and unhappy turn. And I want to remark, also, that much that has been said is clearly out of order, because the question before the Convention is simply this: Are we ready to pass the resolutions saying that we are in favor of an equality of protection as between these two interests, and equality as between us and the other interests of our country? The question is not whether wool pays as much as it ought to, nor whether we farmers work for nothing and find ourselves; but whether we are ready to come together on this common ground of equality among ourselves and equal rights with others. It seems to me that these remarks about prices and duties are unfortunate at this time, because this court has no jurisdiction. When our committees go before the Revenue Commission, or before the Committee of Congress, or before Congress itself, there is the place to bring forth these statistics, in better form and more accurately than we are able to present them now, and with more effect. We, as producers, are very free to admit that we are not informed what protection we have had, or have not had, or ought to have. We are seeking information.

Permit me to hope, then, that the discussions of this meeting may take some other turn; that we may agree upon the question whether we will or will not favor equal protection, equal rights, before the Legislature; and then let us turn to some other topic, the discussion of which we can make of practical advantage. For instance, let us avoid the question whether a ram will grow twenty or twenty-seven pounds of wool, or whether it will grow that being well-fed or ill-fed, kept in the house or out of doors; and turn our attention to such questions as these (and perhaps these would be more appropriate for a Wool-Growers' Convention than for this meeting), whether the common wools are produced in superabundance, and whether the finer or coarser wool (what is usually termed the combing-wool) is the more desirable. Perhaps, too, it would be well for us Western people to learn the names of the various kinds of wool, that we may know what we are talking about hereafter.

Another thing occurs to me that would be of value to us woolgrowers, and perhaps to the manufacturers also. I have been informed, that much wool, good as it may be when it comes from the sheep, is absolutely spoiled for certain purposes by the kind of twine that it is tied up with: it will not take color. There are abuses of this sort that are prejudicial to our interests. Let us have those abuses pointed out; let us agree upon equality, enjoy each other's acquaintance, shake hands and go home, and come together some other time and have another good meeting.

Mr. H. Blanchard, of Connecticut.—I most cordially concur in the remarks of the gentleman who has just addressed the Convention. I do not rise to discuss the relative merits of the tariff, as affecting the wool-growers and wool manufacturers. I believe that that subject will be more properly disposed of by placing it in the hands of a judicious, intelligent, and capable committee. The inquiries which have been sent forth by the Wool Manufacturers' Association to gather information upon this subject are ample to cover all those points that seem to disturb a little—and I do not wonder at it—the minds of some of my wool-growing friends. If the Wool Manufacturers' Association and the Wool-Growers' Association shall be able intelligently to answer the questions proposed, I think they will be better able to act understandingly on this whole subject. Therefore, while replies might be made to many of the remarks that have been offered, I don't think it

worth while to occupy the time of this Convention in meeting points which to us seem very trivial.

Mr. E. B. Pottle, of New York.—I desire to say, in behalf of the Committee who reported the resolutions now under discussion, that they reported them with the general expectation that we were entering upon a new era, so far as regards these two great interests, the wool-manufacturing and wool-producing interests; and I think I may add, that the general feeling all round the committee room was, that bygones should be bygones. The past cannot be recalled; and whether the present tariff bears equally upon these two great interests or not, is a matter which cannot be determined by a resolution, however carefully drawn. But we can agree upon certain principles,—upon a common platform, where we can all stand; and on that common platform we can commence that work which we believe will be not only for our mutual interest, but for the benefit of all the interests of the country. That was the theory upon which we prepared these resolutions.

Now, sir, if it were politic to devote the balance of this Convention to the discussion of the question with our manufacturing friends here as to whether the tariff of 1857, with all the addenda that have been made to it, bears equally upon these great interests, I have some facts, the recital of which would occupy more time than you would care to devote to it; and doubtless others here have facts of the same character. I think a comparison of views upon that question would hardly leave a single manufacturer willing to rise in his place, and say, upon his honor, that an examination of this question left the impression upon his mind that the producer of wool has been protected by the laws of the country to the same extent that the manufacturers have been. But I have no wish to discuss this question. I wish, with my friend from Ohio, to turn this debate aside from these questions which are calculated to produce friction between these two interests.

There can be no question,—it does not argue common sense in any man to get up and maintain the contrary, upon the great principles of political economy,—there can be no question, I say, that it is best for any country under heaven to produce the articles it manufactures, and manufacture the articles it produces, as far as possible. Any government that is a buyer of the products of a foreign government, when it can produce those articles itself, must of necessity be engaged in a miserable business, to the extent which it does it. As has been said by the friend who preceded me, the true wealth of a nation depends upon the products of the soil, and the labor that is bestowed in fitting those

products for the use of man; and every dollar which we pay to encourage the labor of other countries, to stimulate the production of other countries, is so much taken from our own, and so much taken from the actual wealth of the country. Hence it should not be surprising, that we, who claim to be at least possessed of common sense, representing these two interests, - the wool-growing and wool-manufacturing interests of the country, - should come here prepared to lay down, in the form of resolutions, a platform affirming simply the fact of the mutuality of these two great interests; that, looked at from a proper stand-point, - looked at from the stand-point which every good citizen should occupy, a stand-point which compels him to ask, not only for that which is best for him, but which is best for the whole country, - looked at from that stand-point, I say, no other conclusion could be come to, than that which we have put forth in these resolutions; that is, that the interests of the manufacturer and the interests of the producer are but one great mutuality, and whenever one is unduly elevated at the expense of the other, the country suffers.

Looking this question square in the face, we have concluded, as I said before, to let bygones be bygones. There has been wrestling and struggling between the respective interests that are represented here, as there has wrestling and struggling between other interests; and it must have been of great damage to some of those interests, and of great detriment to the prosperity of the country at large. It cannot be helped that it has been so. As I said before, we cannot recall the past, but we can make provision for the future; and that is all that men can ever do. Are we willing to do it? Are we, as practical men, representing two great interests of this country, -- the greatest in magnitude of all the wide-spread and varied interests of this immense country, - are we willing to do that which we are ready to acknowledge is for the best interests of the whole country? We have said, in these resolutions, that we are. Now, is it to be presumed that we have said more or less than we mean? If we mean just what we have said in regard to the matter, then what hinders? Certainly, Congress will not set itself up in opposition to the wishes of these two great interests. There can be no motive in the breast of any member of Congress to lead him to protect and encourage one of these interests at the expense of the other. There can be no reluctance on the part of any member of Congress, or of any branch of the Government, to permit us to carry out in practical operation just what we have said. Well, then, what hinders? Nothing whatever, unless it may be lack of sincerity on our part. Is any gentleman ready to assume that we have come here with the purpose of engaging in a species of double-dealing, - of making professions to the ear which we do not mean to carry out? I will not accept any such insinuation? I think I may say with truth, for every member of the Committee, that what we said in those resolutions we meant; and unless they are carried out in the spirit in which they were drawn, and in furtherance of the purpose they have in view, no set of men will be more disappointed, surprised, humiliated, and ashamed, I may say, than the members of the Committee who have placed those resolutions before you. You must take those resolutions upon the faith that we are men of honor, and mean what we say; that we expect, in very truth, in the language of one of these resolutions, that it shall be the duty and purpose of these two great national associations, - the Wool-Grower's Association and the Wool Manufacturers Association, — to see to it that through the Revenue Commission, and through the Committee of Ways and Means, all the steps are taken that are needful, to lay before Congress those facts which are necessary to carry out all the provisions of these resolutions, in the spirit in which they have been offered, and to procure such legislation, at the suggestion of both these great interests, knocking at the doors of Congress, and asking to be heard in relation to this mutual agreement and understanding, as shall promote the future prosperity of these two great interests.

Now, if I am correct in regard to that, - if that is the expectation of our friends who came here to represent the wool-manufacturing interests of the country, if that is the expectation of our friends who come here to represent the wool-growing interests of the country, why should we differ about the past? Why should we tread upon the old lava that has been burning us up for the last quarter of a century in this country? Why, sir, I think that American industry and enterprise, with that tenacity which my friend (Mr. Geddes) speaks of, which leads Yankee women to make butter at a shilling a pound, even at a loss, if they can get no more, — the never-give-up, never-say-die determination of our country, - I think that would have triumphed over all obstacles, - over the pauper labor and aggregated wealth of other countries, over all the obstructions which we have seen placed in our way, if it had been let alone, and allowed to have scope; but it has not been. The unmistakable curse of this country, ever since I have had any thing to do with public life, has been the continual freezing and thawing of the body politic. A tariff this year, and all the energies of the country turned to adapting its industry to it, and altered the next year; and then, when we got a

little used to the grooves, altered again. This alternate freezing and thawing destroyed the accumulated wealth of those who had based their hopes upon the legislation of the country. This has been going on for years, and has been owing to the fact of the refusal to recognize the mutuality of the great interests of the country, and to provide that kind of legislation which would put them upon a common platform, where all alike could be prosperous. The refusal to recognize this mutuality of interest has led to this continually changing and shifting legislation, until no business man, when he went to bed at night, while Congress was in session, has known whether he would wake up a rich man or a poor man; and men have been disposed to turn up their eves. and say, mentally at least, "Thank God!" when they heard that Congress had adjourned. This was not because of any lack of confidence in the members of Congress; it was not because they were thought venal or foolish or weak, or any thing of that kind; it was because of this vicious American system, of one interest struggling against another interest, which keeps them rolling and tumbling one over another, this up to-day and down to-morrow, and this down to-day and up tomorrow. Now that can be obviated in only one way, and that is by the other great interests of the country following the example which we are trying to set them to-day; that is, to step forth in the spirit of manhood and patriotism, and say, "We will establish a great American system, which shall be known and recognized throughout the world; for no country is so worthy of our care as our own country, and no interests so need to be protected as the interests of American citizens and of American industry." That is the feeling we should have, and that is the spirit in which we should act.

This debt of four thousand millions, more or less, of which some of our friends have spoken,—it is a large amount of money, but a very small price to pay for the advantages we have gained; perhaps the best bargain we ever made in this country, sharp as we are as Yankees. But that debt will vanish, it will cease even to be a bugbear upon exciting electioneering occasions, as soon as we can act upon the great principle, that the immense resources of this country are to be used for the benefit of these United States. Just recognize that fact; just start with that proposition, that, instead of enriching half Europe by the products of American industry, you intend to enrich your own country; to make it as independent in time of peace as it has been in time of war; to make it self-reliant,—and we need have no apprehensions in regard to our debt. Let the world know that we can not only carry

on a war costing thousands of millions of dollars, without applying to any prince or potentate or government under heaven for the loan of a dollar, relying chiefly upon our own resources, but that we mean, by encouraging the productions of our own country, so vast in extent and variety, to be able to stand up independent of all the world, without shivering, even though non-intercourse should be declared with every nation under heaven for the next eighteen months. When we have reached that point, Mr. President, we shall be truly Americanized, and When we shall have reached that point, there will be stability in our legislation, and not until then. When we make up our minds to take care of ourselves, recognizing the oneness of the American people, then there will be stability in our legislation, and not until then. So long as there is a scramble to elevate one interest over another, so long as an eagerness to take advantage of the market of this European country or that shall occupy the attention of the business men of this country, so long we shall have unstable legislation consequent upon this shifting policy.

Now, sir, are we prepared to come upon this common ground? Are we prepared to recognize the great fact, that the wealth of a nation is its own resources; that the honor of a nation is its own safest reliance; that the manhood of a nation depends upon standing up squarely on its own foundations, and asking nothing from all the world besides? If we are prepared for this, we are prepared for these resolutions. If we are not prepared for this; if after all this fair talk, after whispering in each other's ears that we have come up to this millennium of good feeling, where all interests shall be alike protected and fostered, we must go back to the shambles, and scramble for the advancement of one interest at the expense of the others,—then our time is lost time. But, if we mean what we have said, the time is not far distant when every other of the industrial interests of the country, not represented here, will thank us from the very bottom of their hearts, for having inaugurated this epoch of mutuality among the great interests of America.

The PRESIDENT.—The debate has taken a somewhat wide range. I think there has been a little misapprehension on the subject. We have really two reports before us; and, under one, some gentlemen have discussed the other. I have no doubt, that, when we come to a vote, it will be unanimously in favor of these resolutions. I do not believe any gentleman here has spoken with any view to oppose these resolutions, or intends to oppose them. When a free interchange of views was invited, and the Business Committee, headed by the honorable gentle-

man from Rhode Island (Mr. Hazard), brought in the topics for discussion, our friends here, with a little want of parliamentary knowledge, have been discussing these topics under the resolutions; that is all.

The question was called for on the adoption of the resolutions, and they were passed unanimously.

The President.—Gentlemen, the business now before the Convention is the report of the Business Committee; and there are some explanations that can be made here by the manufacturers, and possibly some by the producers, that will be productive of a great deal of good. I trust that we shall not, now that the resolutions are passed, immediately break up. I see before me gentlemen who were manufacturers before some of us were born, and are still manufacturing. Let those men, who have grown gray in this business, tell us something about it. We are ready to listen. And, if they want to press a little pointedly upon us, let them do it: our skins are not thin any more than theirs are. Let us discuss this matter freely, and pointedly, if you please, but without asperity.

I wish to ask these gentlemen if they intend to keep up the one-third shrinkage rule. If they do, I give them notice we will have a debate on it.

Mr. George Kellogg, of Connecticut. — I am no public speaker; but I wish to say this upon the subject of the one-third shrinkage rule. I have been a buyer in the market these forty years; and I have never bought on any other principle than to examine the condition and quality of the wool, and pay what I thought I could afford to pay for it. I have sometimes taken the unwashed wool in a lot one-quarter off, sometimes one-third off, and sometimes one-half off. I have never known there was any one-third rule on the subject. If I find two or three fleeces of unwashed wool in a lot of washed wool, I throw them out, and take one-third; I can't afford to stand and talk about it a great while, if I am making a large trade. But my principle always has been to pay for the wool what I judged it to be worth, from its appearance and condition.

There is one other subject upon which I would like to occupy the time of the Convention for a moment. A great deal has been said here about the relative position of wool manufacturers and wool-growers. It has been said that the farmers are a long-suffering people. I have been

a farmer myself, and raised some wool and sold it, before I went to manufacturing. But I wish to say, that since I have been in the manufacturing business, — forty odd years, — almost all the men who have been in that business have broken down in it. I wish to say, from the experience I have had and from what I have seen, that the woolgrowers have had the best end, and the manufacturers have had the worst end. I have lived to see more than one-half, I believe more than two-thirds of the men, who, up to within a few years, went into the business, break down and fail. I don't mention this by way of complaint; it has been the effect of the unsteady legislation of this country. When we got used to a tariff, that tariff was changed, and we had to get used to another. Any intelligent man, — I don't care if he is a wool-grower, — who is able to look back on the last forty years, must be satisfied that the manufacturers have had the hardest end. I have nothing further to say on this subject.

The PRESIDENT (Mr. E. B. Bigelow, of Massachusetts, in the chair). — I wish to say, in regard to the one-third shrinkage rule, that I verily believe there has been a great deal done by woolbuyers, that the manufacturers are not responsible for. I have no doubt the gentleman who last spoke has acted on the rule that he mentioned, and probably others have done so, --- perhaps half of them, perhaps nearly all. But none the less is it true, that the men who go round the country buying up wool insist on that rule. I imagine that the manner of baying wool is the cause of a great deal of the difficulty between the manufacturers and producers. You, gentlemen manufacturers, know your business a great deal better than I, or any of us, can tell you; but I would like to ask why, when here is a great staple brought into the market, rying considerably in value, you don't send competent men to buy mat staple. I want to know why you allow it to be bought up on commission. I have been thirty years and upwards raising wool; and it is absolutely true, as the gentleman from Vermont has said, that the manufacturers have been paying a premium upon dirty wool. Occasionally, a manufacturer sends an agent who is an intelligent buyer, and is used to it; and he buys discreetly and makes discriminations. But, generally, it is not so. Just as soon as the clip is off, half a dozen men are round buying wool on commission (I don't know who sets them at work, whether the manufacturer or the merchant); and I suppose the more they buy, the better they are paid. These men insist on that rule, and we have suffered from the effects of it; and, consequently, as we have got to have one-third taken off if we don't wash, we want to

put in at least one-third grease, and we ought to do it. If you require that we shall sacrifice one-third on every pound of wool because it is greasy, it is certainly our business and our right to supply you with that grease.

Mr. C. H. ADAMS, of New York. — Why should there be any unwashed wool sold?

The President.—In the first place, wool keeps better that is unwashed; it receives dyes better; works better; and there is no reason on earth why we should be told that we should wash it, unless we choose to do so.

Mr. Adams. — We don't tell you so. We simply say that you bring it part washed and part unwashed. Why shouldn't you bring it all washed?

The President. — Because it suits our interest or convenience not to do so. Here are men from the hills and valleys of Vermont, where the snows lie late, and the mountain streams are cold far into the spring; and they don't wish to wash, because, if they do, they cannot get their wool to market in time. Here are men from the plains of Illinois, who can wash in good time, and they do wash. Have you any right to insist that these Vermont men shall wash, when there is a good reason why they should not wash, merely because men who can wash as well as not do so? Your interests do not suffer. If they did, then there would be some propriety in your complaining. But I say, — and I call upon the most experienced gentlemen who are sitting in this body before me. - I call upon Mr. Hazard, one of the most experienced manufacturers in the United States, to say if I am not right; I say that wool keeps better in the grease than where it is washed; and, when scoured, it works better, and takes dyes better. If a man living on the plains of Illinois or Indiana or Ohio, or in any other section of the country where the streams are warm early, chooses to wash, because he does not choose to pay for the transportation of dirt and grease, there is no reason why he shouldn't do it; and it is mere caprice to say that he ought not to do it. And if a man lives up in Vermont, or on the highlands of New York. eleven, twelve, or thirteen hundred feet above the level of the sea, where the streams are cold late, and where it is the first of July before he can wash his sheep, why should he not be allowed to send his wool to market unwashed, so long as he don't injure your interests?

I come now to the question of the justice of the one-third shrinking rule. I say I have demonstrated, hastily, that we have a right to market the wool in either condition; and that the manufacturers ought not.

as a matter of propriety, to attempt to dictate to us, as long as we don't injure their interests by taking either course. Now, here is an arbitrary rule laid down, that, if I don't wash my sheep, the wool shall be subject to a deduction of one-third from the price of washed wool. Does the butter dealer, when he goes into the market to buy butter, and puts his butter-trier into a firkin, and finds it not exactly in the best marketable condition, insist that the owner shall submit to a deduction of one-third; and then, when he tries another lot, and finds it not suitable for the table, only fit for grease, say that too shall be subject to a deduction of one-third? Would any butter dealer attempt to buy butter on any such rule? Take the case of wheat. Here are two men who present two samples of it. The buyer examines one sample, and judges there is a pint of foul seed to the bushel. Well, he deducts from the market value of the good article what he ought to deduct for that pint of foul seed per bushel. In the next wagon, he finds wheat that has four quarts of foul seed per bushel. Now, I ask you how it would look in the market of Syracuse, if some one should come along and say, in such a case, "It isn't all good wheat, and you must each submit to one uniform rule of deduction; you must each submit to a deduction of one-third."

I am taking it for granted that I am addressing intelligent men, who are ready to hear these things called by their right names; and I undertake to say there is no other article, in the purchase of which the buyer attempts to dictate in that way, and to say, that, in case it is not in a certain condition, a fixed rule of shrinkage shall be applied. I contend that the manufacturers injure their own interests by this course. The wool-growers have got so now, that they don't sell to the experienced agent: they leave the grease in, and wait till the raw buyer comes along. If they see a man whom they know to be a judge, they will hardly take the trouble to show him their wool; they are busy; they don't care whether he looks at it or not. Why? Because they have not fitted it to sell to him: they have washed it poorly. By and by, a man comes along who is buying wool on commission: he knows but little about it, and they sell their wool to him; and, if he makes two or three cents on a pound, he does better than the average in such cases. I say that I can next spring, if I choose (and no man can convince me of the contrary, because I have seen it for years), give my sheep a mere dip in the water, or drive them through the stream; and then, when the buyer asks me, "Is that washed wool?" look him in the face and say, "Yes, sir," and the trade is consummated. Whereas, here is another man who does not wash, but his wool has been exposed to the rains of heaven all the year round, while in the other case the sheep have been housed, so that the fleeces are fifty, sixty, or seventy-five per cent yolk: yet he must submit to the deduction. I think this has produced more irritation between the two classes than any other one thing. I have no doubt that this National Convention will recommend a different course; and, when that is done, it will remove one of the strongest causes of discontent. There are men all about, — some, perhaps, in this room; but thousands, I know, not in this room, to whom this is a constant source of irritation.

Dr. GEO. B. LORING, of Massachusetts. — I wish to make an inquiry; but, before doing so, I desire to say, that having lost the chance, through the ruling of the Chairman, to make the little reply which I was prepared to make to the gentleman from Vermont [Mr. Cutts]. I would simply state to those gentlemen present, who have not heard the discussion before, that that speech has been replied to once before by myself in New England, and several times by gentlemen from Vermont in the newspapers, — that identical speech. When I hear a son of Vermont assailing what has become, at last, one of the great interests of that State, I can only say, as Mr. Webster did, in concluding his great Dartmouth-College argument, when he paused, and, turning to the Supreme Bench, said, "This may be a light matter for you, gentlemen, but there are those of us who have an affection for that old place, and it may turn upon us, like Cæsar upon Brutus in the senate-house, Et tu quoque, mi fili, -- 'And thou too, my son!'" This is from Vermont, and there we leave it.

Now we will come back to the question. I want to know if the manufacturers prefer to have the wool washed. Many of them have said to me that they did not like this practice of purchasing washed wool, but would prefer to have a rule adopted, by which all wool should be sold unwashed. I think a suggestion in regard to this matter might come from this meeting, that would be very useful, not only to wool producers, but to wool buyers, hereafter. Is there any special advantage to the manufacturer in purchasing washed wool?

Mr. N. Kingsburt, of Connecticut.—I can only answer the question for myself; and I will attempt to do so in the course of the remarks which I propose to make, which will be very brief. I have a few things which I would like to say, beginning with the one-third rule.

I must confess that I was not acquainted with the fact that there was

any dissatisfaction with the one-third rule, until within a short time, -three months ago perhaps. As a manufacturer, purchasing wool for the last thirty years, I have made no arbitrary rule of that kind, nor practised upon any arbitrary rule of that kind. It has been our custom, when purchasing a lot of wool containing perhaps fifteen, twenty, or thirty thousand pounds, if there were a few fleeces unwashed, to throw them out in a pile, and for the producer to say, "I want you to take that little pile of one hundred or two hundred pounds of unwashed wool with the other." --- "Very well; you may put it in;" and the suggestion has almost always come from the seller, "I will put it in at one-third less." I know not how a rule of this kind originated, nor do I know how extensively it has been practised. The Chairman has said that it is practised, and of course I do not doubt his word on that subject. If it originated with the manufacturer, I think it must have been in this wise. Many years ago, when it was customary for washed wool to shrink from thirty to thirty-three per cent, unwashed wool, at onethird off, would average about the same price as washed wool. That was a very fair statement of the difference between washed and unwashed wool. I am not aware, however, that any rule like this originated from that source. But I do know this, that, in purchasing wool of late years, the manufacturer's cry has been, "How much clean wool can I get?" I think that question is much more frequently put now, than it was a few years ago; because, when manufacturing commenced in this country, and we were struggling along, we did not keep our accounts as accurately as we keep them now. We did not go into all the details and statistics of the manufacturer as we do now. It has now become a complete system, to every detail of which we give great attention; so much so, that we are able to tell you, in many of our manufacturing establishments, precisely the shrinkage on every single lot of wool which we purchase, be it washed or unwashed. We are able to tell you precisely how much clean wool we get out of every lot we purchase during the year, and then we are able to go on and tell you precisely how much clean wool it has taken to make a yard of goods; and how much wool, as it was purchased, in its washed or unwashed All the details of the business are followed out very closely at the present time.

Now, I have often purchased unwashed wool, and I have always (except in the cases to which I have referred, where I have bought a little parcel of unwashed wool with a lot of washed wool) paid for that wool what it was worth, in my judgment. I have estimated in

my own mind the shrinkage of that wool, or the amount of clean wool it would produce, to see how much it was worth, compared with washed wool. I admit that at present there is a great difference in the shrinkage of what is called washed wool,—a very great difference from what there was twenty or twenty-five years ago. I know that some years our wool has shrunk not less than forty or forty-four and a half per cent, - making a proper allowance for the unwashed wool which may have been purchased, so as to bring it exactly in comparison with the other. If we were now to go into the purchase of unwashed wool, making, in all cases, a deduction of one-third, I admit that the unwashed wool would be cheaper than the washed wool. (When I speak of "washed wool," I speak of wool which is called "washed," but which really is not washed wool.) So far as I am concerned, I think I should be entirely satisfied to have all the wool of this country sheared in its unwashed state, and brought to market. I would like, however, to have some little improvement made in the manner of doing up the wool. I presume to say, that this intelligent body of wool-growers do not know -- they certainly cannot know -- the damage they do to every fleece of wool which they tie up with hemp twine. I tell you it is utterly impossible to manufacture a piece of indigo-blue cloth from wool which we purchase of you tied up in twine or in hemp string. We cannot do it without using another dye besides the indigo blue, and to cover up the imperfections occasioned by those strings. We cannot make a piece of bright, handsome, black broadcloth, out of wool tied up in your hemp strings. There should never be one particle of hemp string, or any other kind of string from which a fibre can come, put It is ruinous, and will become even more round a fleece of wool. and more so, as the manufacturers go more and more into the manufacture of fabrics of plain colors, which require an even, handsome finish.

A DELEGATE. - What would you suggest?

Mr. Kingsbury.—If tied up with any string, it should always be a woollen string, and the string should compare somewhat in fineness with the fineness of the wool.

Mr. POTTLE. — Will the manufacturers send us out such an article for that use? If you will manufacture it, and send it out, see if we don't send you our wool tied up with such strings.

Mr. KINGSBURY. — Create the demand for it, and we will send you the strings.

Mr. POTTLE. - We create it now.

Mr. KINGSBURY. — Say you will adopt them, and we will send you the strings; we can make them.

Mr. POTTLE. — We pledge ourselves to use them, only we shall want you to discriminate between wool that is tied up with that kind of string, and wool that is tied up with hemp strings.

A Delegate. — In sacking the wool, would it not be necessary to use woollen sacking?

Mr. Kingsbury. — We receive damage from the sacking, as well as from the strings, but not to the same extent. I think we could get along with the fibres which come off of the hemp sacking, although we have considered a smooth cotton sacking much better than hemp sacking. In regard to the strings, I hope we shall, in a very few years, create a public sentiment so strong, that not a soul of you will be able to sell a fleece of wool tied up with hemp strings.

Then there is another thing which I want to say in regard to this matter of string. I believe there is a gentleman here who took off from one single fleece seven ounces of string! When we have sorted a lot of wool, we always find a great pile of string, for which we have paid from sixty-six up to seventy-five and eighty cents a pound. We are able to sell it for about three or four cents a pound, so that it is nearly a dead loss to us. In Germany, I believe no string is ever put on the wool. That is, I have never seen any wool imported from Germany that had strings round it.

Mr. Pottle.—I want to state the simple fact, that, for twenty years,—the length of time that I have had my eyes upon this business,—I have never known of any complaint, because of the kind of string we have used. The wool-growers have tied up their wool with these strings without knowing that there was any wish on the part of the manufacturers that they should use any thing else. I say this in justification of the wool-growers. As to the man who put seven ounces of string round a single fleece, of course I have nothing to say in his defence. He was simply a scoundrel.

Mr. Kingsbury.—I am not at all casting reflections upon the woolgrowers for putting hemp string on their wool. It has been the custom, and we have not felt the damage that it has been to us, until quite recently; and we have had no opportunity to state the facts to the wool-growers. This afternoon, they have asked us to make any suggestions that would be for our mutual advantage, in plain English, that all can understand; and therefore I am making them in that way. I have said nearly all I have to say upon the subject. I conceive it to

be one of the advantages of our coming together here, that we can talk over these matters, and that will have a tendency, of course, to rectify all these mistakes; and if we could come together and see each other every year, or once in two or three years, and talk over some of these subjects which we feel aggrieved about, I think great good would result. For instance, it has been said to us who are manufacturers, "You make most wretched work in the purchase of wool." Well, we You ask us why we don't send out are aware of that, gentlemen. competent men to purchase our wool. I will tell you. It is because we are not able to procure our wool in that way, as wool is now purchased in the United States of America. There is no country in the world, that I know of, where wool is purchased as it is here. How is it? Suppose, just after shearing, we start some competent man to go through the wool-growing States and purchase wool, - a man competent to judge of the value of washed and unwashed wool. What is the result? He goes out among you wool-growers and commences to buy, and at once you are surrounded by buyers. Every man in town is a wool purchaser. Every merchant is a buyer, and every man who has got a little wool wants to get a little more. The object is to speculate in wool, and the whole clip is swept off in two or three days, bought up by farmers, blacksmiths, shoemakers, merchants, and every class in the community; and the poor manufacturer, who sent his agent out there at considerable expense, has been able to pick up a few lots, that will afford hardly profit enough to pay expenses. We cannot purchase wool in that way, so long as everybody is to be a wool-buyer. We cannot afford to send out agents under such circumstances; and you must all know that this is the case, to a greater or less extent, in every place.

Mr. POTTLE.—Is not the remedy in your own hands? If the manufacturers would at once say, "We won't buy these lots of wool, picked up by blacksmiths and blackguards and merchants,—these men of whom we know nothing,"—how long would they come into the market?

Mr. Kingsbury.—There you have got us. We cannot do it. We want wool; we must have wool. You don't produce any surplus, cartainly. You only produce seventy per cent of what we want; and we must take the wool, whether well bought or poorly bought. Wool we must have, or the machinery of the country must stop. We are compelled to submit to a great many of these things, such as wool tied up with large strings, dirty wool, and greasy wool, because we must have the wool.

Mr. Pottle.—There is not one man in a hundred who goes round picking up wool who is able to hold it thirty days. Now, if you say you will only take that wool at a lower price than was paid by these men, how long will this state of things continue?

Mr. Kingsbury. — Then competition comes in; somebody else will offer more than we do. It is a thing the manufacturer cannot regulate. We understand it; we know that the wool is not bought judiciously, or as we would like to have it bought; but it is bought as it is bought, and we cannot help it. All these things may be remedied by future action on the part of wool-growers and manufacturers.

I have already occupied more time than I ought, and I will make but one remark further; and that is, that, for one, I am rejoiced to find myself here face to face with the wool-growers of the country; and I rejoice to give to you, the wool-growers of the country, my pledge, that, in time to come, we, the manufacturers, will feel that our interests are mutual, and that we cannot sustain the one, without sustaining the other. The wool-grower and the wool manufacturer must go hand in hand; and, if we will thus go hand in hand, I believe we can procure such legislation as shall be necessary to protect your interests, and such legislation as shall be necessary to protect our interests; so that the great wool-growing and wool-manufacturing interests of the country, now larger perhaps than any other interests, shall go on in a state of prosperity beyond even our highest expectations, and we shall loom up before the world as a people unsurpassed in our manufacturing interests.

Mr. H. BLANCHARD, of Connecticut.—I rise with much diffidence to speak on this subject, because I see so many interests involved in this discussion, which it seems to me are so poorly comprehended by many of us, in their bearings each upon the other, that I cannot expect to elucidate the subject in such a manner as to give entire satisfaction to all the parties concerned.

I have had some experience in the matters under discussion, and perhaps can sympathize with the wool-growers; having been, from the position which I have occupied in years past, associated with them in a way that enables me fully to comprehend all their wants. I know the difficulties under which they labor; and it is this knowledge that has caused me, while listening to these debates, to rejoice from the bottom of my soul that this Manufacturers' Association is organized, and that this National Wool-Growers' Association is organized; that the information which it is necessary should be communicated by the

one to the other, may be made available for the practical benefit of those concerned. All this discussion in relation to the different breeds of sheep is interesting to us as manufacturers. Many of us can look back to the time when the efforts to improve the breed of sheep were commenced; and these discussions are not unprofitable, but will, undoubtedly, result in good. The remarks which the honorable Chairman has made, and the requests which he has made, were made in good faith; and yet, if we were a little captious, we might ask, "What obligations are we under to send agents to you to buy your wool?" No other business is conducted in this way. When we, as manufacturers, want to sell our products, we either do it in person, or we have an agent, who knows their value, and does not receive his estimate of their value from the man who proposes to buy them. You do not do so. Why not? It is in your power to do it. If you farmers would have a competent agent, who understood the condition of foreign markets and of your own product; who himself knew the relative value of wool, washed and unwashed; whose business it was to tell you what Mr. Kingsbury has told you, that, if you put hemp twine upon your fleeces, it is full of fibrous matter, which will be left in the wool when it is drawn through, and cannot be extracted, —he could have told you all this; and he would have been able to come to me and say, "Here is a lot of unwashed wool which I wish to sell you." -- "Very well," I say, "what is your price?" He would not say, "The price of washed wool, a third off." If he was an intelligent man, he would know himself the value of that wool; and, if I wished to purchase, we should have no difficulty in getting at its market value, if there was a market value attached to it.

It is not my province to come here and advise you what to do. I only state these as some of the difficulties which exist. I believe that every intelligent manufacturer to-day makes his estimate, in purchasing wool, upon what he believes will be the net result, after scouring, in clean wool. If he errs in judgment, he will either fail in business or lose money,—that is all. I think enough has been said upon that subject, without occupying your time further upon it.

I will mention a difficulty that exists, to meet the objection that we manufacturers are not fair in our method of buying wool. I have travelled over the mountains of Washington County, Pennsylvania, a good many times, in company with a gentleman well acquainted with the farmers. I go to a gentleman who has raised a clip of wool; and, after examining it, I say to my agent, "There is a fine clip of wool; it

is, I believe, every thing that is desirable; you may pay sixty-two and a half cents a pound for it." I go to another lot, and I say, "The condition of this is bad; its quality is not what I want; it isn't worth more than fifty-five cents." Then I go to another lot, and I say, "This is worth fifty-seven cents."—"Ah!" says he, "if I pay one man sixty-two and a half cents a pound, I can't buy another clip of wool in that neighborhood without I pay the same price." Am I not right? Who will contradict that assertion, among you wool-growers? [A VOICE.—"That is true."] I only call your attention to this, to show you one difficulty under which the manufacturers labor, not to find fault with the wool-growers.

I don't think you can turn upon us, and say that we can correct all these difficulties that exist. I do not know any other way for the manufacturers to do than they have done. The laws of trade cannot be ignored by us: if we should attempt it, we should fail. Supply and demand regulate prices. Every business man will buy where he can buy the cheapest, and sell where he can sell the dearest. That is the principle, — the very principle which you act upon in your business transactions. In effecting our sales, we adopt such a system as in our judgment will make the closest discriminations as to values, as to demands, and as to the proper time to supply those demands.

Gentlemen have complained here about the amount of wool in the hands of the farmers. Is all the wool of the country worked up each year? Why should the manufacturers hold 200,000 pounds of wool, that is worth sixty or seventy cents a pound, and lose the interest on his money, when the grower can as well hold if until he wants it? There are two sides to this question. It is no object for us to buy a year's stock of wool in June, that is not to be worked up until the next May. I think, therefore, that gentlemen need not be discouraged if they have a stock of wool unsold on hand. The season has not closed; the new clip is not yet in.

I wish to say a word in reference to the remarks of our friend who has broached the one-third rule. We expect, usually, that a washed fleece which weighs three pounds will weigh about four and a half pounds unwashed; and if a man comes to us, and wants to sell a few fleeces of unwashed wool with a lot of washed, — you know how it is; they want to sell the whole lot together, — we say, "Put it in, and take off one-third:" but I presume there is not a manufacturer in this house who goes into the market to buy three or four thousand pounds

of unwashed wool, who does not exercise all the powers that he possesses in deciding what the shrinkage will be. The one-third rule has no influence at all upon his estimate; he decides the question upon its If you prefer to put your wool into the market in an unwashed state, I don't suppose many of the manufacturers would object. But I think if you tried the experiment of taking one neighborhood, and let them wash their sheep well, - that is, in a clear, running stream, - and then, after they are properly washed, let them run a week before they are sheared, leave out the tag-locks, and put the wool up properly, according to the custom of the country, --- putting in every thing that is clean and is wool, - and then let another neighborhood put up all their wool unwashed; and, if you had a mathematical demonstration which would so solve the problem as to enable us to tell exactly the relative value of the two lots, nine manufacturers out of ten would take the washed wool rather than the unwashed. Some might take the unwashed; but, every thing else being equal, the great majority would take the washed instead of the unwashed.

You may ask my reasons for this opinion. Our honorable friend, the President, has said that wool will keep better in the grease; but that reason is not relevant in this country, where we have no surplus to be kept for any length of time. The custom has been, in this country, to wash our wool; and that is the custom to which our manufacturers have become habituated. Well, we all know that the customs of a country cannot be changed by the resolutions of a Convention: it requires something more than that. Yet, if it should be found, upon trial, that it is beneficial to have the wool brought to market unwashed, I presume the manufacturers would make no serious objection. There may be cases in which it may not be expedient to wash high-blooded sheep; perhaps it might not be advisable to wash imported sheep, under peculiar circumstances. I presume no objection would be made to receiving washed wool from the rolling country of the Western States, where the climate is such that the streams are warm early in the season, and the sheep can be washed early.

I express these opinions for myself only. I think the wool-growers would find a more ready sale for their wool if it was well washed, and put up in good condition. The difficulty in selling wool has no bearing upon this question whatever. If you will take some measures by which your wool can be intelligently brought to the manufacturers, you will have no difficulty in getting the full relative value for your product. Take Ohio, the largest wool-growing State in the Union. Two-thirds

of the clip are bought up by the country merchants. The manufacturers cannot help that. We are not responsible for that. The country merchant thinks he is a very good judge of wool; he thinks he understands how much wool ought to shrink, and what its relative value is; and, as he approaches the farmer to buy from him his clip, understanding his peculiarities, and calling into exercise all the shrewdness of which he is capable in making a bargain, he pulls on just such a string as he thinks will be most effectual in order to induce him to sell that clip at the lowest price. Is not that so? I think you will agree with me that it is so. Now, what can the manufacturers do to correct such an evil as that? The merchant gets ten or fifteen thousand pounds of wool collected in his loft. Some of the manufacturers go out into the country, and they find this lot of wool on hand. They want the wool, -they are out in the country to buy wool, - and they buy it; the merchant charging them, perhaps, two or three cents a pound more than they could have got it for from the producer. The merchant leaves the impression on the mind of the wool-growers, that the objections which he brings against their wool are brought by the manufacturer. I suppose that none of you need be told, that to be qualified to judge accurately in regard to the relative value of wool requires a little more experience than is derived from dealing in it for four or five weeks in a year, and simply examining the outside of a fleece. I think the manufacturers are not responsible for the manner in which your wool is sold in the country. I cannot take any blame to myself; I think the onus is on you. But if you can, in your individual capacity, or in your collective capacity as an Association, devise some way by which your wool can be intelligently brought to the manufacturers of this country, all these difficulties which have been described here will be removed.

Now let us look at the course pursued in other countries. Is there any other nation in the world that sells wool as we sell it? Take Germany, for instance. There the skirts are taken off the fleeces, two or three are laid together, and they are rolled up in one parcel, with perhaps a single string round them, and perhaps none. If there is a string, it is a twine of hemp that is made smooth and glazed, so that the fibres, when it is drawn out, shall not be left in the wool. There is no objection to such a string, and in that condition there is a value to be attached to that wool, as washed wool. We go into the market and buy foreign wools, and make our estimate of the shrinkage. We buy American wools, and estimate the shrinkage. The millions of

pounds of wool coming from Texas is unwashed; but there is no difficulty in getting at the value of it. It is just as good as Vermont wool; but the facilities for washing are so poor that they are not able to wash it. The one-third rule does not prevail in regard to it. In short, I may say that there is no one-third rule which has been established by the manufacturers. If any exists, it has been established more by the local buyers than by any other class of purchasers. I have often seen unwashed wool that I would not take at forty or even fifty per cent discount, while I have seen other lots which at twenty or twenty-five per cent discount would be very cheap. There is no other principle of action, as I have already said, by which manufacturers are governed, than this, "What percentage of wool can I get from that lot?" and, when that is decided, we regulate the price.

Mr. H. Cutts, of Vermont. — I wish to be indulged in making a short statement in answer to the remarks made by the gentleman from Massachusetts [Dr. Loring]; and, in that statement, I think I shall be borne out by more than one gentleman here present. The gentleman says that he has replied to the speech I made once before. I deny that he has ever answered any speech that I have made anywhere in this world, and I can produce witnesses to bear me out in this statement. The only color of support that he has for this statement is this. On one occasion at Concord, N.H., he came out with a similar speech to that which he has made to-day, and, with the same dictatorial manner, undertook to prescribe to breeders what breed of sheep they should raise. I answered that speech then as I have answered a similar speech to-day. If my speech appears to him to be the same as that I made at Concord, it is because I was answering a similar speech made by him. I don't know that I have ever made a similar speech anywhere else.

I must say one word more, in answer to the imputation the gentleman puts on me of being unpatriotic; that is, of not being a true and faithful son of Vermont, in saying what I have said. "Et tu, Brute," he says. How is it? I accorded honor to these men for all the improvements they had made, both here and at Concord, on the former occasion to which I have alluded. All I object to is, that he should undertake, as the champion of a particular breed, to say that that is the only breed to be raised, and that no one else shall say there can be any improvement upon it. He sets that up as the golden calf that must be worshipped; and, if any man don't worship that golden calf, he is declared to be unpatriotic to Vermont, where he sets it up. That is

the way I understand it. Now, I have yet to learn, that, great as has been the improvement made upon merinoes in Vermont, all men must sit down and fold their hands, and say there can be no further improvement, and, if any man presumes to doubt that statement, he is to be denounced as unpatriotic. I claim to be as patriotic as that gentleman, or any other; and I claim that my statement is true in regard to this,—that that gentleman has never answered any speech of mine.

Dr. LORING.—This matter of packing wool has been one of very great interest to me, as a practical matter. How to get at it, is the question. What we want is a uniform price for wool, if we can find it. Now, shall we get that by having a part of our fleeces washed, and a part unwashed; a part tied with strings, and a part not? or shall we endeavor to create some temptation to those who are growing wool here, to present their wool properly in the market? Perhaps the German method of tying with glazed twine might answer. Might not wool be packed in cotton bagging, or something of that sort?

Mr. Blanchard.—One suggestion occurs to me. If I wished to manufacture a piece of broadcloth with a brilliant lustre, and give it no other color except that which was embodied in the wool itself, I would wish to have it free from any foreign substance. If I wished to pack in linen sacking, and in the most perfect manner, I would scorch the sacking, so as to take off the little fibres on the inside. Or, if it was very fine wool, I would take sacking that had been used, and the fibres worn off, and then I think the manufacturer would find very little difficulty. But, if you would pack it in the most perfect way, you would either pack it in cotton, where there would be no fibres to rub off, or in linen sacking, scorched in the way I have suggested.

Then, in regard to the string. I suppose all the string that is necessary is just enough to keep the fleece together. A very small twine, just strong enough for that purpose, is all that is needed. Every gentleman can use his own judgment. There is an abundance of this kind of twine in the market. I can buy twine for sixty-five or seventy cents a pound, that the manufacturer never would complain of; but I can't buy it for twenty or sixteen cents a pound. Instead of weighing three or four ounces, all the twine necessary would not weigh more than the tenth of an ounce. So far as fancy cassimeres are concerned, and the great bulk of the woollen productions of the country, there is no objection to packing the wool in the ordinary wool-sacks, as it now

comes to market. There would be no objection to ninety-nine one hundredths of the wool that is manufactured to-day, on account of the sacks in which it is placed. I was speaking only of the extreme cases.

Dr. LORING. — Now I want to ask another question. Suppose it was known that the whole clip of wool in the United States was unwashed, I want to ask the manufacturers whether they would not consider that they could go into the market and purchase that wool with more chance of forming a correct judgment in regard to its value, than they now do, knowing the various methods of washing that are pursued, and buying part of their wool washed and part unwashed.

Mr. Blanchard. — Another remark is necessary in replying to that question. The judgment of men accustomed to discriminate between the different qualities of wool in this country has been formed on washed wool, as a general thing. A new exercise of judgment would be required with unwashed wool; for, so far as my observation goes, and I think I can find those present who will agree with me, - fleeces in the unwashed state appear, in their size and fibre, different from Hence you must educate the judges of wool — so far washed fleeces. as American wool is concerned --- to decide upon a different scale from the present. I do not say that cannot be done. Of course, if all the wool of the United States was unwashed, they would know what its value was no better than now. Every wool-grower might shear his clip unwashed; and there would be just as much difference in the value of their wool, unwashed, as to condition, as there is now. I don't think the purchaser could get at its value any better than now.

Dr. Loring.—The statement has been made here, in regard to this one-third shrinkage rule, that it is not universal. One gentleman remarked that it is rather a local matter. Here is the monthly special report of the wool market of Chicago; and underneath it says (which would seem to bear out that statement), "One-third off for all buck fleeces unwashed, and ill-conditioned wool." Now, that is not a general test, applied to all the wools brought in the Chicago market: it is merely applied to unwashed wool and buck fleeces, which are considered, I suppose, to vary in value from other wool in that proportion. Now, if this is the case,—if this is merely a local matter,—cannot something be done to establish a rule which will prevent the introduction of such fleeces into the market?

Mr. Blanchard. — No rule can be adopted but an actual test. If a hundred bales come to me that weigh two hundred pounds a piece,

and whoever purchases them of me throws out three or four bales of unwashed wool (which is no unusual thing), and I find that those three or four bales weigh three hundred pounds a piece, I should say that the one-third rule was near enough for all practical purposes, on so small a quantity. But, if I was buying twenty or even ten thousand pounds, I should want a closer discrimination than that.

Dr. Loring.—I have listened to this discussion with great interest. Very many suggestions have been made, that will be of value to woolgrowers, if they will only heed them. I find that it is an almost interminable subject. The manufacturers differ, and the wool-growers differ, in regard to it; and now I move, as the sense of this Convention, that the National Association of Wool Manufacturers be requested to appoint a committee of three from their body, to unite with a similar committee to be appointed by the National Wool-Growers' Association, to investigate this matter of the one-third shrinkage rule, and report at some subsequent meeting; and that the Chairman of these two organizations be requested to make the nominations.

This motion was carried, and the Convention adjourned to seven o'clock, P.M.

EVENING SESSION.

The Convention was called to order shortly after seven o'clock by the Chairman.

Mr. R. G. HAZARD, of Rhode Island. — Mr. President, — In the course of the discussion, in regard to washed and unwashed wool, a question which I think very pertinent was asked by a gentleman on the other side, and answered in part by my friend, Mr. Blanchard. It was, whether there would be greater or less difficulty in judging of wool in the unwashed condition, than there is in the washed. There is, however, I think, Mr. President, one element in that question which has not been introduced, and which would go to increase the difficulty of judging of the unwashed wool: a small error in judgment will make a great difference. I will endeavor to illustrate it by taking two extreme cases. Suppose, in the first place, that a manufacturer is buying a lot of wool, say a hundred pounds, which is very clean. He estimates that it will waste not more than five per cent. He pays ninety-five cents a pound for the lot, and estimates that the wool costs him, allowing five per cent for waste, a dollar a pound. Suppose he error

five per cent in his judgment, and that, instead of wasting five per cent, it wastes ten. He then gets ninety pounds of wool for his ninety-five, which, instead of a dollar a pound, will be a dollar and something over five cents. A difference of five per cent, in his judgment, has made a difference of between five and six per cent only in the cost of his wool. Now, take the other extreme. We will suppose that he buys a lot of wool, of which he estimates that the waste will be ninety per cent, and for that he pays ten cents a pound. He has then, he thinks, ten pounds of clean wool, costing him ten dollars, which will also be a dollar a pound. Now, suppose he errs in judgment five per cent in this case, and that, instead of wasting ninety, it wastes ninetyfive per cent; then he has only five pounds of wool for his ten dollars, - making it cost two dollars a pound. In the one case, he suffers a loss of less than six cents per pound on it; and, in the other, of a dollar a pound. I present these as extreme cases, merely to illustrate the point. I don't present it as conclusive, by any means; but merely as one element to be taken into account, when that change is made.

I was also asked, by the President, for my opinion upon this point: whether it would be better that all the wool should come into the market washed or unwashed. As an abstract question, I think it would stand a little differently from the practical question which we have to meet. The practical question is, whether we would prefer to have the wool come into the market with no pretence that it has been washed, or have it come into the market called washed, but in reality differing very little from unwashed wool; and, upon that question, I have no hesitation in saying, that, for one, I would prefer to have it come in unwashed. The difficulty in judging of it, I think, would hardly be greater; the variety, certainly, would not be greater, if all came in unwashed, than now, when it comes in partly washed and partly unwashed, with all the grades, from well washed, down to merely running the sheep through a brook.

But, independently of this question, I still think, upon the abstract question, I should prefer to have the wool come into market in an unwashed state; and I will mention some reasons for this preference. One is, that I believe wool keeps in better condition, and works better, when we receive it in that state; and one reason of that is probably this. It is a fact familiar, I believe, to nearly all manufacturers, that if you take a fleece of wool, as we receive it at the mill, and immediately throw it into water, it is very difficult to scour that wool clean. There is some peculiar effect produced upon it by throwing it into cold

water, which makes it extremely difficult to get it into a proper condition to werk afterwards. I don't know whether other manufacturers have noticed this fact; but that has been my experience, and I think I can see a reason why it is so. It is that the yolk of the wool will make, to some extent, a scouring liquor, which will mix with the oil of the wool. I have had wools from which I have made a liquor which would not only scour themselves, but other wools in addition. Some African wools will do that. It is reasonable to suppose, that if a fleece is merely wet with cold water, and then given to the manufacturer, we should encounter the same difficulty. I admit, sir, that in practice we do not usually encounter it; for I believe the farmers are very careful to provide, that we shall not, by suffering their sheep to run long enough after they are washed before shearing, to get the wool back into its natural condition. Thanks to them for that!

I think, Mr. President, there is a reason for adopting some rule in regard to the relative value of washed and unwashed wool. I do not say the one-third rule is the proper one. I think the proportion has varied from what it was when we got a part of the wool really washed and the other part unwashed, though I do not think the difference is so great as the gentleman [Mr. Blanchard] supposes, because I think that the change in the method of breeding sheep has caused as much gain to unwashed wool, in proportion, as wools have lost by being washed. It has already been sufficiently explained, that, when wool comes to market, the one-third rule practically has no effect. If the whole lot is unwashed, a price is put upon it according to its merits, without any reference to what it would be if washed. But when, as is generally the case, much the larger portion is washed and only a small portion unwashed, it is found convenient to have some standard as an approximation to what the unwashed wool is worth, as compared with the other; inasmuch as, the bulk of the wool being washed, the price will be fixed upon that. But in such a case, if the unwashed wool amounts to any considerable portion of the value, I think almost every purchaser examines that as much as the other, and exercises his judgment on the question whether it is worth more or less than the onethird difference; and, as he considers it worth more or less, the amount is added, or taken off. But there are cases in which it is important to have a rule for that purpose, as near as may be to the actual condition of things; and yet it is not very important to have it exact. A man, for instance, looks at 100,000 pounds, perhaps a part of it only exposed to view. He has no opportunity of seeing whether there is or is not any unwashed wool among it, and must judge how much it is worth if washed. He fixes the price, and then, perhaps, goes home. When the seller comes to pick it out, he finds some unwashed wool; and, in such cases, it is well, to save trouble, to fix upon some deduction upon that unwashed wool, which shall be somewhere near what it is worth; and the one-third rule has been adopted for that purpose in the same way, as, in some places where there is no law regulating interest, they still make a rule regulating the price of money where there is no contract.

I have no hope that any recommendation which we may make will cure the evils which grow out of the fact that wool is purchased by incompetent, ignorant, or reckless buyers. But there is another question which lies back of that, which it may be important for us to discuss. and which ought some time to be settled; and that is, whether it is better, in the main, that wool should come into the market washed or unwashed, --- whether the general interests of society require the one or the other. That is a question of itself important to be considered, and one upon which discussion may throw light. I have already stated the reason why I should prefer it in the unwashed condition, upon the abstract question. At the same time, I am aware, as no gentleman can fail to see, that in this case, as in all cases, the interest is mutual between the manufacturers and the wool-growers. It is for the interest of the manufacturers, that that course shall be pursued by the woolgrowers that in the end will enable them to give us the greatest quantity and the greatest value of wool at the lowest cost; and if, in one section of the country, the farmers are so situated that the expense or inconvenience or injury to their sheep by washing is greater than the cost of transporting the extra waste, and the other disadvantages attending that, I should say, decidedly, let them take that course by which they can give us the greatest value at the least cost. And if, in another section, they are so favorably situated with regard to washing, that they can usually give us the greatest value by washing, let them pursue that course there. And so with regard to all the other points. I think that is the main thing to be considered. If, by producing the wool in connection with a very large amount of oil, you can still give us a greater value of wool at the same cost, then let us have the oil with it; and - I was almost going to say, but I think it is hardly necessary to say it, for the hypothesis is scarcely admissible — if, by giving us the wool in connection with five, ten, or twenty per cent of twine, you can give it to us cheaper than by not putting on the twine,

then let us have the twine. In all cases, that one principle must be the controlling one. That course which is the most economical, on the whole, will be adopted in the end; for it is to that that natural causes make the thing tend. I am aware of the influence of custom, which has been very well alluded to by one of the gentlemen who has preceded me, and of the influence of habit, and, sometimes, of prejudice: but prejudice and habit and custom are all things which yield most readily to discussion, to inquiry and knowledge; and it is therefore hoped that a discussion of this subject may lead us to the true result in regard to this particular matter.

While I am upon this point of mutuality, which I think is one of the most important we have to discuss, I will merely remark, that perhaps, from a proper point of view, we may consider the wool-growers as the manufacturers of cloth. They are engaged in the first of a series of processes by which grass and grain are converted into cloth. There are other processes more or less divided in different countries and in different sections. Sometimes the spinning is done by one man, who transfers the yarn to another to be made into cloth; and, in England, it is quite common for the maker of the cloth to transfer it to the finisher, to be colored and finished. Now, I say we can no more separate the interest of the wool-grower and the wool manufacturer in this country, than we can separate the interest of the spinner from that of the maker of the cloth, or that of the maker of the cloth from that of the finisher: they are indissolubly united together.

There is only one other point to which I wish to advert in this connection. It is one which I believe has not yet been touched upon, but I deem it of great importance. I allude to the demoralizing influence of the present system of purchasing wool, and putting it up for market. I find that men who are honestly disposed to put up their wool in good condition have not been encouraged to do so. On the contrary, I am well aware, that the mode in which manufacturers have bought their wool has had a great tendency to discourage any such course of procedure. One man has his wool well washed, shears it as soon as it is sufficiently dried, and offers it for sale in that condition. His neighbor has scarcely wet his wool, or not more than wet it, - has done it no good at any rate, or, if he has, suffers his sheep to run long enough for the yolk to be increased to the usual weight before he shears. An unskilled buyer comes along, and looks at both parcels; and the chances are that the man who puts up his wool poorly will get more than the man who puts it up well, because his wool, having been put up clean,

will feel dry and a little harsh and brittle, while the other man's will have a softer and finer feeling. The result is, that the man who has put up his wool well, really has contributed to the price paid to the one who has put up his wool badly. In that way, the man who puts up his wool in good condition fails to get a fair price for his product, and the other man gets an advantage to which he is not entitled. I think this has a demoralizing tendency in all cases.

Mr. R. M. Montgomery, of Ohio. — If this Convention will be patient with me a few moments, I flatter myself I can put this thing in a better shape than it is at the present time. I don't know that I shall succeed; but I hope I may.

I wish to congratulate my fellow wool-growers, in the first place, that this discussion has brought out one thing which I was glad to hear, and which will give us at least one advantage when we go home. It is this. We have been selling our unwashed wools to the buyers in the Western country, who have told us that the manufacturers required that this difference of one-third should be made between washed and unwashed wool. The manufacturers tell us now that that is not the rule. Next year, when we sell our wool to them, and they tell us that the Eastern buyers insist on taking off one-third on unwashed wool, we can say to them, "Gentlemen, the Eastern buyers require no such thing,—you scoundrels! You take the wool from my neighbors old ram, and sell it honestly to those Eastern men for unwashed wool; and you buy my wool, that is washed by the rains of heaven better than one-half the wool that is sold in the market, taking one-third off, and sell it to them with three-thirds on."

I am authorized to say, for the men of Ohio, that we do not complain because of the amount of the reduction, but we complain of the uniformity of the rule; that all wool that a man is honest enough to say is unwashed must be reduced one-third, while another lot, equally dirty, if called washed, comes in without any reduction. What we complain of is, the making of this wool, which is called washed wool, the standard by which we must suffer in the sale of our wool, if we choose to sell it in an unwashed condition. We understand the manufacturers very well. We understand that they buy it according to its value, without reference to the rule. But we object to the rule imposed upon us of an indiscriminate reduction, whether it is in one condition or another, if it goes by the name of unwashed wool.

Perhaps I shall explain it better by an illustration than in any other way. Two or three years ago (the precise time is not material), my

wool did not come into market until late in the season. I did not ask any price for it; but one day there came along a man who has bought all the wool in our neighborhood for a good many years, and he said to me, "I would like to buy your wool; I can give you just seventy-five cents a pound for it." — "Very well, I can take seventy-five cents." I will say that my wool was tolerably well washed that year; not so well as it used to be, because circumstances have changed. I have a neighbor, whose boy told me that two men washed five hundred of his sheep in one afternoon, and might just as well have washed a thousand; and not only that, but it was six weeks before they were sheared. I asked this buyer, "Did you buy Mr. --- 's wool?" -- "Yes." -- "What did you give him, - seventy-five cents?" - "Yes." This man, who has bought perhaps five hundred thousand pounds of wool a year in my neighborhood, could tell me that he gave this man precisely the same for his half-washed wool that he gave me for mine, which was tolerably well washed! I had some unwashed wool, which was as good as that man's half-washed wool; but he deducted one third on that.

Now, we would like to sell our wool for what it is worth, without reference to what another man sells his for. I think I have said enough on that point. It is needless for any honest wool-grower to say that he deprecates this as much as the manufacturers. It is only one of the many practices by which those of us who are tolerably honest are made to pay for the dishonesty of others. We ask the manufacturers to make a discrimination, and give us what our clean and well-put-up wool is worth, and not make us suffer for the misdemeanors of our neighbors.

It has been asked why we wish to sell our wool in an unwashed condition. One reason is, that we don't want to subject our sheep to the labor of carrying ten or twenty pounds of wool, soaked with water, as it will be if they are washed any thing like well for a week, more or less, until it gets dry. We don't choose to dress them in wet clothes for that length of time. Another reason is, we want to shear our sheep early; and, if we undertake to wash them, we cannot do it, for the water is too cold, both for the sheep and the men, early in the season. A great many men in our Western country cannot go into the water. One is subject to rheumatism, another to ague. A great proportion of our men are foreigners, raw men, not capable of handling sheep skilfully; and then the cost of getting it done is more than the increased cost of getting it to market, with the dirt still in the fleeces.

Mr. W. F. Greer, of Ohio. — Permit me to call your attention to one fact, which seems to have escaped you; and that is, the objection

with which the one-third rule is met in our own State. And I may be permitted to remark, that the facts which have been stated here with regard to this rule are of great importance, and would give a value to this Convention, if nothing else were accomplished. It has been remarked by one of the speakers, that the fact that the growers object to this rule was unknown to him until quite recently. Now, sir, this matter has been discussed in our State Association for four years; in fact, it was the cause of the formation of the "Wool-Growers' Association" in our State. What we object to is the standard by which the value of our unwashed wool is fixed. If the manufacturers will, in determining its value, estimate it upon the basis of scoured wool, we will not object. But the standard of washed wool is so uncertain, that it is not a very safe one to base an estimate upon.

Mr. E. B. POTTLE, of New York. — There is one question which I wish to ask my friend [Mr. Montgomery] in connection with the subject he has been discussing. It has been asked whether the growers prefer to sell their wool washed or unwashed. I say I should prefer to sell it unwashed; and the first and obvious reason is, that it is a cruel thing to wash sheep. No matter how careful the man may be in driving the sheep to be washed, they will get heated; and then, when they are in the pen, the very nature of the animal is such, that, before you can catch half a dozen, they are in a perfect state of fermentation from heat and fright. They are taken and soused into a trough or brook; and it is like taking them from fever heat, and putting them directly into the coldest water. I have seen the injurious results following from washing in my sheep for a week afterwards; and I have been obliged to put them into my warmest stable, and keep them there ten or twelve hours, until they were brought into a state of perspiration, to counteract the effect of the sudden change to which they had been subjected.

The second reason is, that it is wrong to require hired men to go into a brook, and stand all day for the purpose of washing the sheep. Now and then, a man will protest against it, and refuse to do it; but, as a general thing, they submit to it, because they labor for us, and are bound to obey our orders. It is an unhealthy practice; and many a man, now a hobbling cripple, may date his misfortune back to the time when he went into the brook to wash sheep, when it was cold enough to chill a man clear through. That has been the custom; but I think we are intelligent enough now to correct that practice. We ought to put our wool into the hands of the manufacturer, without subjecting either man or beast to the inhumanity to which this custom of washing has given rise.

Now, I put the question to my friend, Does your experience concur with mine on this point?

Mr. Montgomers. — My experience fully concurs with yours; and I may add, that frequently I have seen very injurious effects from washing. I think the universal testimony of my neighbors is, that the sheep do not gain, but lose, all the time from the day they are washed until they are shorn, as a usual thing. But I say to you, sir, that I apprehend these wool manufacturers will very readily understand the cruelty that this custom engenders to the sheep, and the injury it does to men who will handle sheep carefully, and they will accept our explanation without much question. It is only our reckless, careless, devil-may-care farmers who will tell us it don't hurt the sheep. They don't pay any attention to it, and don't know whether it hurts them or not.

Mr. Pottle. — There is another fact that should be mentioned in connection with this matter; and that is, the way sheep are handled when they are washed. The man who owns the sheep don't go into the water and wash them. You cannot get a gentleman (I use the term, of course, in its social sense) to wash sheep. The work is intrusted to Irishmen and Dutchmen; and no matter how careful you may be in instructing them, they will catch the sheep and handle them as they would sticks of wood. Sometimes, when a sheep has died in consequence of this rough handling, I have taken the pains to have it skinned, and shown the carcase to them, to let them see the effects of their treatment. When a sheep has been caught up by the wool, and held so that its whole weight is sustained by the wool, and thrown into the creek in that way, if you will kill it and skin it half an hour afterwards, you will find a space of from six to twelve inches from which the skin has been entirely raised from the carcase, and that the blood has settled there until it is as black as your hat. Inhumanity like this ought to be stopped.

Mr. Montgomers.—I want to say one thing more; and, having said that, I will detain you no longer. We, as wool-growers,—and especially in Ohio,—have asked whether there was any advantage in having the wool brook-washed, except for the matter of convenience in transporting; and we have asked different questions in reference to this subject, part of which we asked really for information, and part of which we asked, hoping that the answer, having authority as coming from the manufacturers, would give us an argument against the gentlemen who buy our wool of us. At least, that was one object that in-

fluenced me. If we learn from you manufacturers that you don't object to the wool in an unwashed state,—that it is no damage to the wool,—we then have an argument which we can use, when we go home, to those who buy wool. We have your authority for saying there is no benefit in washing the wool, and it gives us some advantage in carrying out the practice of not washing among ourselves.

The President (Mr. E. B. Bigelow, of Massachusetts, in the chair).—It is quite a custom among producers to put tag-wool into their fleeces, as they put them up. Before washing,—say about the first of May, when the sheep are first turned out to grass,—they are tagged; and, in tying up the fleeces, a handful of this tag-wool is put into each fleece. One of the manufacturers at the New-York meeting asked my opinion of that practice. I told him, and I wish to express that opinion here again to my brother producers. It is a fraud. We have a right, under the custom of this country, to put all the wool that is clean into the fleece. But if we sell our wool washed, and if theatags are cut off before washing, we are bound to put those tags into a tub, and wash them as well as the wool is washed, before we put them into the fleece.

Mr. POTTLE. - Will the gentleman allow me to make one statement? My practice has been - and it is the usual practice of men who mean to be honest --- to throw the tags into a pail, and give them as thorough a washing as the fleece gets, and then roll them up inside the fleece. I discontinued that practice, because I became satisfied. first, from looking at the tags after they were washed, and, second, by consulting two or three eminent manufacturers (and I want to see whether the testimony of these gentlemen concurs with theirs), that the process of washing destroyed the value of the wool; and I will tell you why. Before these tags are washed, you can separate the good wool from the poor, and what there is left will be worth something. The result of washing is, that they are all felted together, and you cannot get them apart. Several manufacturers have told me they would rather have them separate than have them mixed up together, the pure with the impure. Hence I have adopted the practice ever since, of putting the tags in one corner of my wool-house, unwashed, insisting upon the condition, when the buyer came round, that they should be taken with the fleeces, according to the general custom.

Mr. RANDALL. — I had proposed to suggest that same course. If the sheep have been allowed to run to grass, and the tags have become stained by dung, there is no doubt the course mentioned by Mr. Pottle is the only proper one. The point I make, however, is, that putting unwashed wool into a washed fleece is fraud, and it would be so declared by a jury.

Another question asked me was with regard to putting in dead wool. Every farmer who has any considerable number of sheep will have three or four, or half a dozen, die during the winter. It has been the custom to treat their wool like the tags. I think this is a most unqualified fraud. I don't want to use any milder term than that. The man who puts a bit of dead wool into the middle of a fleece commits the same crime in principle, although it is not the same in effect, as he who puts a stone there. Some men put stones in; but I think our people ought to abandon the practice of putting even dead wool in!

This matter of tying up wool is another thing to which I wish to refer. It is a disgraceful thing for any wool-producer to have a single fleece of his all twisted up with twine. We do up our fleeces differently from what they do in Germany. By the custom of this country, you have a right to use three strands of moderate-sized twine round the wool; and then, if it bulges out considerably, it is a very common practice to put another round the other way. I do not see any objection to this, so long as the twine is visible. I don't believe there is any man within the sound of my voice, — indeed, I know there is not, — who does these objectionable things; but I think those of us who claim to be representative men in sheep-matters ought to despise the men who do such things, and teach others to despise them.

I am glad Mr. Kingsbury told us what kind of twine to use. We cannot use very small twine in tying up these large fleeces. The reason is, that no man's hands can stand it. You must have twine large enough to be drawn with some strength; and with the twine we now use, a man has to wear gloves, and, even then, the hardest and horniest hand gets sore in doing up fleeces one day. I want to know if there would be any objection to using common-sized twine, put three times round the fleece. If it is put round only twice, the fleece bulges, throws off the twine, and the fleece breaks to pieces. It is necessary, therefore, in order to keep the fleece in a compact form, to put the twine three times round. That makes seven or eight feet of twine. But there it is; you know what it is; and there can be no objection to it, if it is done in a workmanlike manner. It is under your eyes, and you can make such a deduction for it as you please.

Mr. H. BLANCHARD, of Connecticut. — So far as I am concerned, I think the chief cause of complaint is the large twine that has been

used, more particularly for the last three or four years, made from a kind of jute. In many cases, that is full of fibrous particles, which are constantly coming off into the wool. There is a kind of twine that was used fifteen years ago in putting up our best fleeces, that is perhaps about two-thirds the size of a pipe-stem, — a smooth, glazed twine, which has no fibres to come off into the wool. I have never heard a manufacturer complain of wool tied up with twine of that kind, put three times round. But when tobacco twine is substituted for that, — and that is used now about as much for tying up wool as tobacco, — the evil is so apparent, that I think the wool-growers must see the force of the objection to it.

Mr. RANDALL. — If you can tell us where we can buy the twine you describe, we will get it and use it.

Mr. BLANCHARD. - We buy it every day almost.

Mr. Randall. — I am ashamed to say, that I had my wool tied up this year with the twine to which the gentleman objects; but it was because I could get no other. I went myself into every grocery and every store in my town, where I thought it possible to get twine; and I could find nothing but that rough, miserable stuff, made out of jute, I suppose, which had slivers of the bark projecting from it; and, when you draw it, you draw off those slivers into the wool, and either they have all got to be picked out, or the cloth will be injured in point of color.

Mr. N. KINGSBURY, of Connecticut. - I still retain my idea, that no string should be put on but a woollen string. It is very apparent to the manufacturers of this country, that we are going to produce a different kind of goods from fancy cassimeres. Several mills are now working on goods which require a very fine face, and I am fearful this same difficulty will occur. My own opinion is, that woollen twine can be produced, if it will be used by the producers. There are mills enough, and they might as well go to work to make twine to tie up wool as any thing else. Two pounds of woollen string, in my opinion, would tie up a thousand fleeces. [Voices. - "Oh, no!"] You must bear in mind that wool string is only about half as heavy as hemp string, no matter how much you glaze the hemp string. But suppose it took four pounds to tie up a thousand fleeces. The wool would weigh, in an unwashed state, six or seven thousand pounds; washed, perhaps four thousand pounds. You will easily see that the expense of tying up your wool with woollen strings would be trifling, and this difficulty would be entirely removed, at a very small expense. It

might cost somewhere in the neighborhood of \$1.75 a pound. Your four pounds would cost you \$7.00. The manufacturer would buy it back at the same price which he pays for the wool; and the extra expense, over and above what the wool-grower would get back, would be very small. It would be reduced to the very smallest fraction of a penny per pound.

Mr. Blanchard.—I must take the liberty to differ from my friend in his estimate as to the quantity of woollen string that would be required, and also to the feasibility of carrying out his plan. I have had some acquaintance with the wool-growers of eleven different States, I may say; for I have received wool from that number of States, and handled it. I think we are not sufficiently advanced in this country to put into the hands of the wool-growers of the different States which now produce this wool, the material he speaks of. We can put into their hands, or they can obtain that kind of twine that has been formerly used; and I think, if we should attempt the plan he suggests, we should fail to carry it out. I think we ought not to sanction the trial of any impracticable measure; for it would be adopted by only a few men, and the object would not be attained at all.

Mr. Pottle.—I want to pledge the wool-growers upon a single point; and I know I am safe in making the pledge. We, with our friends the manufacturers, hold to the great law of demand and supply, which leads a man to sell where he can get the most, and buy where he can buy the cheapest. That law will regulate this whole matter of string. Now, what I want to say is, that the wool-growers will tie up their wool in such a way as you will make it for their interest to tie it up,—in the way that will bring them the greatest sumber of dollars and cents when they come to sell it. All theories outside of that will fail.

Mr. BLANCHARD.—Allow me to say, in reply to that, that I think the gentleman, if he went through Nebraska or Iowa or Wisconsin or Illinois or Indiana, would meet with considerable difficulty in finding any class of men who would adopt a system that would be so difficult to carry out as that proposed by my friend, Mr. Kingsbury; and, when their wools come into market, they become, of necessity, mixed up with wools that that gentleman [Mr. Pottle] sells; and how is the manufacturer to discriminate, and pay him for his wool a suitable advance on the price of the other? I understand his argument is based upon the fact that the manufacturer is to go to the wool-grower to buy his clip.

Mr. Pottle. — No, air. Just say to the wool-broker, when he comes up with his wool, "Here is a lot of wool done up with tobacco string; I shall deduct two cents a pound on that wool," and I will guarantee that the wool won't be tied up in that way next year. Away up in Nebraska and Iowa, they will have that kind of string which will enable them to get the most money for their wool.

Mr. BLANCHARD. — To my mind, the plan does not seem practicable.

Mr. R. G. HAZARD, of Rhode Island. — I am afraid, that, until we have some practical method of giving the wool-producers pay for these strings, we shall never meet the difficulty. I think it comes back to this: Determine what is the best mode, and, if a respectable number of wool-growers adopt it, in the nature of things they will get paid for it. They will get as much more for their wool as it is worth; and, if it is worth more than enough to pay for the additional cost of the strings, there will be an advantage to those who adopt the practice.

Mr. W. F. Greer, of Ohio. — I can bear witness to the fact, that there has never been a moment in our market when a man who chose to buy a good string, of the character described, and was willing to pay thirty-five or forty cents a pound for it, could not get it. I have used that kind of string myself for some years. I was led to do so from selfish motives, not knowing that the manufacturers objected to the cheap string. I tie up my own wool, and I have suffered from sore fingers in consequence of it; and any gentleman who thinks any thing of his fingers would be perfectly willing to pay the extra expense necessary to procure a better article of twine. But still the large quantity that is bought in our neighborhood is sold for eighteen cents a pound; and, with wool at a dollar a pound, it affords a very handsome profit.

The matter of washing tags is another subject that has been brought to our attention. I wish to confirm the remarks of my friend, Mr. Pottle, upon that subject. It was formerly the custom with our people to wash their tags in tubs, and extract all the filth they could, so that they were absolutely as clean as it was possible to make them by cold water. But, during the last two years, acting upon the advice of our principal buyers, they have changed the practice; and it is now the uniform custom to put the tags in the wool as they come from the sheep, unwashed. This has been done in accordance with the wish and at the request of the wool-growers. I think Mr. Pope can speak more advisedly in regard to the northern part of Ohio: but I believe the

custom is becoming more and more prevalent in our State; and, if there is any fraud or error in it, the regular buyers are the persons who are censurable for bringing it about.

Mr. George W. Bond, of Massachusetts.—I wish to say, in addition to what the gentleman has just stated with regard to this practice which has obtained of late of putting dirty tags and dead wool into the fleeces, that when wool comes to market, and is offered for sale, if they are found rolled up in the fleeces, it is regarded as a fraud, and the buyer is considered entitled to an allowance for any such foreign matter thus rolled up in the fleeces, and frequently a great deal of trouble arises from that cause.

I think Mr. Montgomery must have misunderstood the remarks of the gentleman who spoke with regard to the one-third discount. Mr. Kingsbury, to my surprise, did say, that he was not aware that there was any such fixed custom as that of deducting one-third on unwashed wool.

Mr. KINGSBURY. — No, sir: I said I was not aware of any arbitrary rule of that kind.

Mr. Bond. — Well, up to within eight or ten years, the custom in our market was to deduct twenty-five per cent; but, to conform to all the other markets, I should say it had been the invariable custom, for ten years past, to deduct one-third. It was not necessary for a person to ask the question what allowance was made on unwashed wool. Unless there was a special stipulation for a different allowance, the party purchasing a lot of fleece wool was entitled to one-third discount on the unwashed fleeces.

Mr. Blanchard. — You refer to the unwashed fleeces in a lot of washed wool?

Mr. Bond. — Yes, sir. An entire lot of unwashed fleeces was sold according to its merit. But I should say, that, in a majority of cases, the manufacturer would prefer leaving them, rather than to take them at one-third discount.

Mr. Pottle. — Before any new topic is entered upon, I desire an expression of opinion whether it is beneficial or not to wash tags. As high an authority as Senator Simmons, of Rhode Island, said he considered it a positive damage to tags to subject them to soaking in a tub, and then to put them into the fleeces; that he would far rather have them rolled up by themselves, and then sold with the fleeces. If he misled me, I wish you to put me right.

Then, with regard to unwashed tags being put up with washed

fleeces. There is a little confusion, I think, in regard to this. If they are rolled up in washed fleeces, and the whole sold as washed wool, of course it is a fraud. I have known a dozen trials of such cases, and never one without a conviction, and never a conviction that was not followed by most exemplary damages. But if, following out the custom of any portion of the country, or in accordance with an understanding with the wool-buyers, a man puts his tags into his fleeces, and says to the buyer, "This is washed wool, but the tags are put in unwashed, in accordance with the custom of the country," there is no fraud on the part of the seller, though there may be on the part of the broker, when he sells the wool to the manufacturer.

Judge Colburn, of Vermont. — I can give gentlemen my own conviction upon this subject. These tags should be put up by themselves in a sack, and sold as unwashed wool, one-third or one-quarter off, just as seems to be proper.

Mr. POTTLE. - That is the way we do it.

Judge Colburn.—I never in my life—and I have been growing wool forty years—put a tag in with my fleeces. I have kept the tags separate, and carried them to some factory and exchanged them for cloth. One year, Mr. Bingham, a Boston dealer, came to my place, and, seeing the tags tied up by themselves, said, "I want to get one lot of wool without any tags, and I will give you three cents a pound more for that wool than I would if it had tags if it." I believe, that, if we should get into the habit of keeping the tags entirely away from the fleece, and sell them by themselves, the manufacturers would pay us a price that would be remunerative. We should dispose of our tags for what they are worth by themselves.

Now, I wish to propound one question to the manufacturers, and that is, whether they have any objection to fleeces being split.

Mr. George Kellogg, of Connecticut.—It seems to me that the object of splitting fleeces is to give the impression to the buyer that the wool is light wool. Light, small fleeces generally have less coarse wool in them than large fleeces. Just cut in two a buck fleece, and it gives the impression to the buyer that there are two fleeces of light wool. I think it is a species of deception.

Mr. Blanchard.—One word upon that point. In opening a fleece of wool for sorting upon the sorter's board, it is spread out, and the lower qualities in the fleece are taken off; and, if it is a well-bred fleece, in many cases the whole of the inside part of the fleece will go into one sort. If you cut the fleece in two, it is certainly more incon-

venient for the sorter and the manufacturer than if the fleece is entire.

The President (Mr. Bigelow in the chair). - Some six or eight years ago, after my fleeces got to be pretty heavy, a buyer came to look at them one day, and we began to talk of splitting. Said I to him, "Would there be any objection to splitting those fleeces?"— "No," said he, "not if we understand it." -- "Supposing I give you notice I am going to split my fleeces?" said L -- "I wish you would," said he. (He was not a manufacturer; he was buying to sell again.) Well, I directed my men to split some of the fleeces, and he marched off. He had not got more than a hundred yards from the barn before I began to consider why it was he was so very willing I should split my fleeces. I didn't have to think a great while; and said I, "Boys, put those fleeces together again, just as they were: we won't have any split fleeces go from this barn." The object of splitting is to commit a fraud on somebody; and a high-minded producer will not make himself, even indirectly, a party to a fraud. If I raise a ram fleece, I will keep it together, and call it a ram fleece. Mr. Pottle says, if I tell a man I am going to do it, it is no fraud. I don't suppose it is. If I tell a man I mean to do a dirty thing, and he don't object to it, it is no fraud. But if he, through my act, commits a fraud on somebody else, I am an accessory to the crime, if I don't commit it directly.

Mr. Pottle. — One word. Don't let us tread upon each other's toes here. My friend from Ohio [Mr. Greer] says it is the custom in his country to put the unwashed tags in with the fleeces. Now, in that case, when it is a recognized custom, can they be accused of fraud? It is a bad practice, I admit. I want to ask my friend if I understood him correctly.

Mr. GREER.—Most certainly. But perhaps, in justice to our growers and myself, I ought to state, that we have but a very small number of what are known here as full-blooded sheep. The universal practice is to tag them quite early in the spring, before they leave the stables. The matter of putting the tags up separately, just as my friend Mr. Kingsbury has described, was suggested to the buyers; and they objected to it. They said, "We want you to put that part of the wool which you think belongs to each fleece with each fleece."

Mr. A. Pope, of Ohio. — My friend Greer referred to me when he was on the floor before: but I thought perhaps the President would come to his rescue, and save the credit of Ohio wool-growers; for I really think they need some apology. I can only say, that I do not

think his statement applies to the whole of Ohio. It may to some neighborhoods; but, as a general thing, it is not the case in Ohio that they put up the tags without washing.

Mr. Greer.—I trust my friend Mr. Pope and the Convention understood me. I meant only that this was the case in my particular neighborhood, where the buyers have created the custom.

Mr. Pope.—I will not dispute it. One of your buyers bought a lot of wool for me; and, I must say, it was the most extraordinary lot of wool that I ever had come from your neighborhood. I have bought wool in other sections, where I have been served in the same way; and I considered it a fraud upon me. It is so with strings also. Some of the strings are quite six feet long, and tied with a double bow-knot a foot long! If I had known what course this debate was going to take, I would have brought a pocketful of those strings, just to show you what they are. But then the string is all out in sight; and we make a calculation, just as though there was a stone of a pound weight in the wool.

Mr. Blanchard.—I am sorry to say,—and I think every wooldealer and manufacturer will justify me in the remark,—that the character of Ohio wool has deteriorated within the last five years, in the estimation of Eastern men, until it stands to-day no higher, the bulk of it (there may be exceptions), than Michigan wool. I certainly think I am safe in saying that it has declined, in the estimation of Eastern men, from eight to ten per cent. I speak now of the wool of the State, as a whole. There are many honorable exceptions.

Mr. POTTLE.—There is just this which I desire to say, to be put right alongside of what the gentleman from Connecticut says. For the last three years, you gentlemen manufacturers have not had a buyer out in the State of New York who has not met us constantly with this statement: "The reason why we don't give you as much for your wool as we do for Ohio wool is because your wool isn't put up so well as the Ohio wool. Put up your wool as they do in Ohio, and we will pay you as much as we do for Ohio wool." Now, how is that?

Mr. Montgomers. — If the Convention will pardon me, I wish to add my mite to the information which is to be given here, that all may share in the benefits of this meeting. The remark is made by the gentleman from Connecticut, that Ohio wool has depreciated in reputation at the East. Many of us understand that very well; and I may as well say to you, that you will understand it better in four or five years than you do now, unless some other course is taken than the one you

have pursued of late. I am not finding any fault with you; but you, as well as we, must submit to the natural course of things. It may be possible that there are gentlemen within the hearing of my voice who have known, by reputation, the clip of wool brought from Ohio as belonging to Cortland, Montgomery, and Brown. It may be that none of you have ever heard of it: it matters not whether you have or not. We had a very nice lot of sheep, taking in those three flocks. I question whether the State of Ohio had then, or ever had had before, or ever has had since, a better lot of wool for the manufacturer than that was. That wool, bred with the greatest care that we were able to give it, kept in the nicest condition in which we were able to keep it, washed in the best manner that we knew how, - taken late enough in the sesson for the water to be warm and comfortable, so that we need not be in a hurry, and when the river was clear, - wet all over, and suffered to go back to the pen and stand perhaps an hour to soak, and then taken again to the river and washed by the hands of our hired men, the owner himself standing in the water, and every sheep passing through his hands before it could go out, - put up with just string enough to hold it, and then offered in the market. During John Brown's time, we made an effort to get some sort of compensation for that kind of wool, put up in that condition; and, for a year or two, that wool was brought eastward, assorted and sold all along from forty-five to eighty-five cents a pound, which gave us pretty good satisfaction. But as it was Mr. Brown's misfortune, and perhaps our misfortune, that he was one of that class of men who run things until they run them into the ground, that arrangement was broken up; and we went back to the ordinary plan of selling our wools at home. after having pursued that course for some years, it occurred to us that it didn't pay very well. Those fleeces would weigh about two pounds and a half, — a little more or a little less, — and we could sell them for a few cents more than the ordinary wools of the country. Getting a little tired of that, I purchased some sheep that gave heavier wool; and the man who had bought wool of me, whose name was Brown, and who hought very largely in Ohio, came to my house and began to scold, because I would let my nice light-wool sheep go down to raise that heavy wool. "Now," said I, "Brown, I would very much rather raise this nice wool, and I would very much rather put it up in fine condition; I am an enthusiast over it; I have done it for years, and I don't like to sacrifice it: but you will come along, and give Tom, Dick, and Harry forty-seven and forty-eight cents for their wool, and will haggle

with me for forty-nine and a half. I have done business for fun long enough; I am going to raise some wool that will pay. If you will give me seventy or eighty cents, or something that shall compensate me for my labor, I will raise the other kind of wool cheerfully; but if forty-seven cents buys ordinary wool, and forty-nine and a half buys this nice wool, we will change the programme." That is the reason why Ohio wools have deteriorated in value, and are bound to do so, until some other course is taken and some other plan is adopted.

Mr. Blanchard.—I did not mean to throw any disparagement on Ohio wool. I think that wool very desirable, — more desirable than any other, except Pennsylvania wool.

The fourth subject for discussion was then taken up; to wit, the wool best adapted to the various manufactures, especially that of worsted.

The President. — We should be glad to know what you do with our wools; what kind of wools go into what kind of fabrics. We should be glad of some practical information upon that subject.

Mr. HAZARD.—The President of our Association [Hon. E. B. Bigelow] has paid more attention to this subject, perhaps, than any other person; and I hope we shall hear from him upon it.

Mr. Blanchard. — If the inquiry is with reference to worsted wools particularly, I think our Secretary has some facts in regard to it that will be of interest to the wool-growers here. But, sir, in connection with that, if I may be indulged with the attention of the assembly for a few moments, I would like to express briefly some views of the different kinds of sheep, which, in the estimation of manufacturers, it would be desirable to raise in this country.

There are diversified interests among the manufacturers. There is a great diversity of talent among them. One man, possessing a taste, a cultivated taste if you please, for fancy articles, will enter upon the manufacture of those fabrics that are styled fancy goods, and succeed in them admirably, and to the entire satisfaction of himself, as well as benefit to the community. Another man, attempting to produce the same article, would fail in business in less than six months. I know some men who have spent almost a lifetime in making black doeskins, until they have attained a perfection in the article that is almost unsurpassed by the Germans. Let those same men attempt to manufacture a cheap article, and the probability is that they would fail to accomplish their object.

Now, I have thought that perhaps the same principle might apply to wool-growers. In my experience with the wool-growers of the country, I have sometimes found a man who would take a Saxony flock of imported sheep, retain all their excellence, and continue to improve on that flock, until he had secured perhaps one of the best in the United States. I have now in my mind one man in Washington County, of whom you may have heard, - I mean Mr. Samuel Patterson, - whose flock was, if not superior, at least fully equal, to any other in the State of Pennsylvania. He had a taste for it; and, by his knowledge of the habits of Saxony sheep, he was enabled to cultivate them, and to cultivate them with success. Other men prefer to cultivate the merino sheep; and, in the application of their minds to that branch of sheep culture, they have been eminently successful. Another class of men, living near large cities, who may go into Canada, or into some of the sections of the country where a large kind of sheep are grown, purchase their stock, take them to the vicinity of the large cities, put them upon their pastures, feed them until they become fat, and then take them to market and sell them for mutton: such men, though the wool that is upon these sheep is coarse wool, are successful in that branch of sheep husbandry. Hence, it seems that we need this diversified application of the talent of the country in the production of the raw material, as much as we need the diversified talent that exists among manufacturers in producing the various articles we want.

Now, if this is so, - I make these remarks to throw the thought before the minds of the wool-growers, — is it wise to abandon the growth of Saxony wool? If I mistake not the public sentiment of the wool-growing community at the present time, it is that the grade of wool which is usually denominated merino, is fine enough to meet the wants of all the manufacturers of this country. Let me assure you that it is not so. Unless you do produce the Saxony wool, we, as manufacturers, will be forced to resort to foreign markets for a supply. There are certain fabrics manufactured to-day that cannot be made without that grade of wool which is denominated Saxony wool, - fine wool, - finer than any other that is produced in this country (I use the words as they are practically used among farmers, without specifying the difference that exists between them). If you wish to-day to make a very fine broadcloth, — and, if the object we have in view is carried out, that the manufacturers of this country are to supply the wants of the country, - you must have clean, fine wools to do it; such wools as the Australian, Cape of Good Hope, or German wools. If you don't, you cannot make the article.

I will give you an instance, to show the difficulty of getting this fine wool, which illustrates the point I have in view. I am engaged in the manufacture of ladies' shawls. The consumption of our mill, for the year, is about 350,000 pounds. In the last six months, I directed the sorters, if they found what we term a "pick-lock" fleece, to lay it aside. During these six months, they have only saved about four hundred pounds of that quality. The next grade we use is what is ordinarily denominated the fine wool of this country. From that we have made an article, which, when taken to New York, was sold to a prominent importer at an advance of thirty-three and a third per cent over any article of the kind ever made in this country. I believe, except, it may be, something that was made for exhibition at a Fair.

I only allude to this to show that that kind of wool must be produced in this country, if we intend to supply the demand of this country for fine fabrics. If that be so, is it wise on the part of the wool-growers of this country to abandon the raising of fine wools? I know you may turn on me, and say, "You won't pay us for it;" but I say we will pay you for it, if you will sell it as cheap as we can get it from the foreign grower, and not without. That is plain common sense: I say we can pay you for it; and I say, that, if properly classified, and properly presented to the manufacturer, you can get your price for it. But you can't take your Saxony wool to the manufacturer of fancy cassimeres, who wants a medium grade of merino wool, and expect that he will pay you as much for it as the manufacturer of fine broadcloths, fine doeskins, and fine shawls. Unless you can present that wool to the manufacturer who wants to use it, you can never get its value. If it is sold to the passing buyer, who is travelling round the country, he will give perhaps a cent and a half a pound more for it than for ordinary wools.

I simply call your attention to this matter, that you may think upon it, and act upon it as your judgment may dictate. I now renew my call upon our Secretary, for facts in his possession in relation to worsted wool.

Mr. John L. Hayes, of Massachusetts.—I will respond with pleasure to the request of the gentleman from Connecticut, and submit to the Convention some considerations bearing upon the importance of increasing the production of combing or worsted wools in this country; but, before addressing myself to that special subject of inquiry, I desire to call attention to some facts which will throw light upon the extent to which wool in general is used in the textile arts, and which will illus-

trate the demand in the markets of the world for this material, and the tendency of the age towards its increased consumption. There is no more interesting or practical question, to the producer of wool especially, than the inquiry whether there is a demand for his product, and whether there will be such an increased demand as will continue prices, and justify him in expending capital for increased production.

In pursuing this inquiry, we are struck with the observation that nature is economical in the supply of the raw material, or rather in the varieties of raw material, which are to be worked up by man. How few are the great natural staples which make up the bulk of commercial commodities! But the uses of any raw material, which is found applicable in the arts, are infinite. We utterly fail to imagine the new applications to which such raw material may be made. Every improvement in the arts, in chemistry or machinery, each new step in the progress of civilization or luxury, increases the modes of application, and consequently the demand. The demand for a particular fabric or manufacture may cease through change of fashion, but the demand for the raw material never.

The demand for wool received its most important impulse in modern times at about the commencement of the present century, or perhaps the latter part of the last century, from the great improvements which were made in cotton machinery, which were applied also to wool. The improvements in the spinning jenny, the introduction of the power-loom, and the establishment of the factory system, multiplied the power of the manufacturer to such an extent, that an unprecedented demand for wool began to arise. Then the increased use of other kindred fibres added also to the consumption of wool. It is a curious fact, that cotton, although it has always been regarded as the rival of wool, has added largely to its consumption. It is stated by English observers, that the use of cotton warps has added vastly to the extent to which wool is used in England. Entire factories are now engaged in the manufacture of cotton warp; and it is found, that, by the use of this warp with woollen filling, cotton, instead of being a competitor, is the most important auxiliary of wool.

I will now refer to the statistics which illustrate the progress of the demand for this material. The increase in the consumption of wool is strikingly shown by a comparison of two periods in England, no further apart than thirty years. The importations of wool into England thirty years ago were — from Germany, in round numbers, 74,000 bales; from Spain and Portugal, 10,000 bales; the British Colonies, 8,000 bales; sundry other places, 5,000 bales. Total in 1830, 98,000.

Now, compare these imports with those of 1862 and 1864. In 1862, the imports from Australia were 226,000 bales; from the Cape of Good Hope, 66,000 bales; from Germany, 29,000 bales; from Spain, 1,000 bales; from Portugal, 11,000 bales; from Russia, 40,000 bales; from the East Indies, 52,000 bales; from South America, 80,000 bales; sundry other places, 96,000 bales. Total, 585,000 bales. Then we come to 1864, and we find from Australia, as against 226,000 in 1862, 302,000 bales; as against 66,000 from the Cape of Good Hope in 1865, 68,000; as against 80,000 from South America in 1862, 99,000. In all, in 1864, 688,336 bales.

Comparing that with the importation only thirty years before, we have 688,000 bales as against 98,000. Australia now supplies more than three times the whole amount of foreign wool consumed in England a third of a century ago. The production of South America exceeds the whole consumption then. In this short period, the consumption has actually increased sevenfold. The production of wool in England is 250,000,000 pounds; the imports, 184,000,000; the exports, 54,000,000, — so that the total amount consumed in England is 380,000,000 pounds. Add to that the shoddy, of which 65,000,000 pounds are consumed, and we have the enormous total of 445,000,000 pounds of wool consumed in England alone.

Now this increase of production and consumption is not confined to England alone: it goes on in the same ratio in other countries. In 1861, France exported woollen goods of the value of 188,000,000 francs; in 1863, 283,000,000 francs. The production of Germany, Russia, and Austria, is increasing in the same ratio; so that we have now, it is estimated, a consumption in all the world of 1,600,000,000 pounds of wool, and yet hundreds of millions of people, as in China, are just beginning to appreciate the value of woollen fabrics. Even France has but just commenced to supply herself with carpets.

The testimony taken before the House of Lords in 1828 shows, that, although less than 98,000 bales of wool were brought into England at that time, every warehouse was filled with wool, and stocks were lying on hand sometimes for five or six years; whereas, at the present time, as I am informed by an English gentleman of great intelligence, and a very large dealer in wool, Mr. Bowes, the warehouses are exhausted, and there are no stocks on hand. The demand is fully up to the supply.

The facts in relation to prices are not less interesting. In 1855, the price of English combing-fleeces was 1s. 14d. In 1864, the price of

the same wools was 2s. 4d. Australian fleeces averaged in 1855, 1s. 8d.; in 1864, 1s. 10d. Cape fleeces in 1855, 1s. 5d.; in 1864, 1s. 4d. Buenos Ayres, fair mestizo, in 1855, 7d.; in 1864, 8d. Cordova, in 1855, 8\frac{3}{2}d.; in 1864, 11\frac{1}{2}d.

Thus we see that the fine wools have not declined: they have kept about the same ratio.

But the question still remains, Will the demand for the fine wools, relatively to other kinds, continue? In considering that question, it is worth while to look at the production of Australia particularly, and the facts which show the extraordinary increase in the ratio of production in the Australian Colonies. In 1797 three merino rams and five ewes were carried there; but so slow was the introduction of the production of wool into those colonies, that it was not till 1807 — ten years later - that the first bale of wool was carried from Australia to England. But the flocks of Australia did not originate from that The development of fine wool husbandry in these colonies was the result of an accident. Some English whalers captured in the South Seas, about the beginning of the present century, a vessel proceeding to Peru from Spain, in which there were three hundred merino rams and ewes. These sheep were carried to Australia, and originated the fine merino wool, whose production is now estimated at 100,000,000 pounds; and are sold in special market at London, to which all the manufacturers of the world resort. The production of fine wool of Le Plata is estimated at 100,000,000 pounds; and of the Cape, at 50,000,000 pounds. And when you remember that only a portion of Australia has been developed, and that the vast and fertile interior still remains to be opened up, who can tell what shall be the production in the future? The Pampas of the Argentine Republic offer even a more unbounded field for production. They present a vast uplifted alluvial plain, eight hundred thousand square miles in extent, presenting an ocean of verdure, where wool-growing in the production of fine wool called mestiza, or improved wool, is pursued with more vigor and profit than in any other part of the world, with the single drawback that the value of the wool is greatly impaired by burrs derived from a species of clover peculiar to the vegetation of the Pampas. In view of the fields for the production of fine wool, thus rapidly expanding, which are opened abroad, it is well to inquire whether it may not be desirable to turn our attention to some other of the various kinds of wool in which the competition of foreign countries is not likely to be so formidable.

In considering this matter, the producer of wool should not overlook the competition with clothing or merino wool of a material which was not known in manufactures until the present century. shoddy, or rather that variety of shoddy known in England by the name of mungo. The term "shoddy," strictly speaking, is the name applied to fibre made from soft rags, from flannels and blankets which were first used in manufacture of cloth. The use of this material originated at Batley, in England, in 1813. Mungo is the fibre obtained from hard rags of fine broadcloth, such as clippings from the tailors' shops. This was not introduced until later, and the manufacturers of Batley were quite incredulous of its being utilized. The Yorkshire man, who first conceived the idea of using the fibre of hard rags, obstinately replied to the objection that the material could not be introduced, "It mun go" (it must go). It did go, and a new substance was introduced into the arts, and a new word into the English language. Of shoddy and mungo sixty-five million pounds are consumed in England, more than our whole clip of wool in 1860. It is estimated that twenty-five thousand persons are employed in converting shoddy into cloth, and that the value of the product is five or six million pounds sterling. The fact, however, to which I wish to call attention is, that shoddy comes in competition with fine or cloth-wool only. It is not used in the manufacture of worsted, and does not take the place of combing-wools.

When we look at the facts as to prices before given, we find that the English combing-fleeces were worth in 1855 only 1s. 11d.; in 1864 they were worth 2s. 4d.; that is, they had more than doubled in ten years, while cloth-wools had just about held their own in respect to price. England is the only country which has devoted itself exclusively to the production of the long combing-wools required for the manufacture of worsted. She cannot, or does not, produce any fine wool. There are, in fact, no merino sheep in England. It is believed, however, that England has attained to the utmost production of this wool, of which her limited territory is capable. The manufacturers of Bradford are already alarmed, and have issued circulars to induce a greater supply of lustre wools. England is the only country which now produces, to any extent, the long combing-wools. It is found that in Australia the combing-wools cannot be grown; and they cannot be grown at the I have the authority of Mr. Bowes for saying that the experiment has been fully tried, and has signally failed; that Leicester, Cotswold, and Lincolnshire sheep have been repeatedly carried to Aus-

tralia and the Cape, and every effort made to introduce the culture of long-wooled sheep; but it has been found, that after a little while the wool is converted into hair, and it is now admitted that the long combing-wools cannot be grown in Australia or at the Cape. But the combing-wools can be grown in the United States. The fact of the fitness of this country for the growth of combing-wools is completely established by the success which has attended the production of that kind of wool in Canada. The amount of combing-wools now produced in Canada is between five and six million pounds. The quality, in the English market, is not regarded as by any means equal to their own combing-wools, because the same care is not taken in its production, and the English complain that the wool is full of burrs. In England the most extraordinary care is taken. The fields are actually swept, that the fleeces may receive no injury from dirt. But our worsted manufacturers have found the Canada wools perfectly good substitutes for the English wools, and have paid as high as \$1.40 currency for wool worth five years ago only twenty-eight cents. The attempt has been made in this country to manufacture alpaca goods from this long combing-wool, for which, by reason of its lustre, it is peculiarly fitted. There was some failure in the first experiment, and the manufacturers supposed that the wool was not suitable. They then sent to England, and imported a thousand pounds of the best combing-wool; and, upon a comparison of that with the combing-wool of Canada, it was found that the Canadian wool was equal to the English in every respect. I have here some specimens of this fabric, which is called "alpaca," because it is an imitation of the fabrics made from alpaca wool. (The speaker held up the specimens to the view of the Convention.) This stuff is made of a filling of the long combing-wool of Canada with a warp of cotton. The fabric is equal in finish and lustre to any imported from England.

The question is eminently worthy of the consideration of our farmers, whether the long-wool husbandry may not be profitably introduced into this country. This is a question upon which we, as manufacturers, pretend to give no opinion. We can only assure the farmers of the United States, that there is a growing demand for this material, that there will be less competition in the growth of this wool than in any other, and that the prices are certain to be higher than for any wool which can be grown in this country. To determine the question of profit, it will be necessary that experiments upon an extensive scale be tried, and will be doubtless necessary that a system of husbandry

should be developed in this country analogous to the four-field system in England, but fitted for the peculiar necessities of our soil and climate. I can conceive of no subject more worthy of the attention of the National Association of Wool-Growers, formed here to-day, or of the boards of agricultural colleges in the several States.

It may be said that the introduction of long-wool husbandry will interfere with that already established in this country. I see no force in this objection. It is probable that this kind of sheep husbandry can be profitably carried on only in those districts where there is a demand for mutton, and where the mutton will be as much an object as the wool. It seems to me, Mr. President and gentlemen, that the development of this species of sheep will not interfere with the branches of sheep husbandry which are now pursued, but will give an increased demand for the peculiar kind of merino wool now being produced by the intelligent skill of the Vermont breeders. Dr. Loring this morning quoted some remarks of mine in reference to the peculiar value of the American merino fleece. I am convinced that the fabrics to which the coarse merino wool that seems to be in favor here is best adapted, has not yet been manufactured in this country to any extent. The class of goods to which that wool is peculiarly fitted are the fabrics somewhat analogous to the goods called "coburgs" and the goods called "merinoes" and "thibets," the soft stuff goods for women's wear. Now, in that branch of manufacture, or that of stuff goods as distinguished from cloth goods, France employs three hundred thousand persons. In this country, there were not five thousand employed in 1860. The remarkable development of that branch of industry in France is attributed to the peculiar qualities of the merino wool which the French possess. This wool is long in staple, the sheep are of unusual size, and the fleeces heavy, having in fact the very characteristics of the American merino. M. Bernoville, a very eminent manufacturer and a practical man, who has written a work on the combing-wool industry of that country, - one of the most learned works that has ever been written upon any branch of the practical arts, — describes these fabrics in detail, and gives the reasons why France has obtained such eminence in their production. The most important reason which he gives is in these words:-

"The first fact that we ought to proclaim abroad is, that without the introduction of the Spanish race into our flocks, and without all the skill of our agriculturists, we should still vegetate in dependence upon neighboring nations, and should be reduced to clothe ourselves with their stuffs. It is to

the admirable revolution in the raising of ovine animals that we owe the beautiful industry of spinning the merino combing-wools. It is to this that we owe the splendor of the industries of weaving combing-wool at Paris, at Rheims, at Roubais, at Amiens, and St. Quentin."

Now, I wish to enforce this position. In order that the worsted manufacture should be developed in this country, --- and by the worsted manufacture I mean the manufacture of stuff goods in their infinite variety for female apparel and furniture trimmings, &c., as distinguished from cloth goods, - there must first be a supply of long combing-wool from sheep of the English breed. The development of the manufacture created by the supply of these wools will be the most certain means of creating the demand for the long merino wools for soft stuff goods, for which I have shown they are peculiarly fitted. We are as yet but in our infancy in our manufactures. before us, as wool-growers and manufacturers, is to clothe all the people of the United States with our wool and our fabrics. We have but just commenced the work; and when a full supply of raw material is furnished, and grower and manufacturer are encouraged by a stable system of protection, the imagination can hardly conceive the grand field which will be opened in this country in the industry of wool and woollens.

You will excuse me, Mr. President, for dwelling upon agricultural questions which do not strictly belong to my department. I am not a practical man in such matters. The only right to speak upon the subject of wool and sheep which I claim to have is the hereditary right which I derive from the fact, that my father, an extensive farmer in the State of Maine, was the introducer by his own importation of the first Saxony sheep into that State; and that, when a boy eleven or twelve years old, I have spent many a cold night in caring for the poor lambs, too tender for that excessive climate, born in the freezing nights of February. It is with no little pleasure that I find the interest connected with the association of my boyhood revived by the pursuits of maturer years, and strengthened by the instructive discussions to which I have listened to-day.

Allow me, before I sit down, to allude to a relic of aboriginal history which was vividly brought to my mind yesterday as I journeyed for the first time on my way to this place through the valley of the Mohawk. Some years ago, I visited some of the Indian tribes which still survive in the eastern parts of the State of Maine, and was struck with the singular tradition which I found remaining

among them of the strength and ferocity of their ancient enemies, the tribe of Mohawks. The Indian mother, it was said, still quiets her erying child by breathing the terrible name of Mohawk. It is the way of ignorant and barbarous people to cherish the memories of ancient hatred. It is the triumph of civilization to do away with old enmities and prejudice. We sit here to-day, gentlemen, near the old council grounds of the departed Mohawks; and we, gentlemen, we of the Eastern tribes, have come up to-day to meet you, gentlemen of the West, with no recollection of the old feud which has divided us so long. "We have," to quote the language of one of your letters, Mr. President, "washed off our war paint, if any yet remains." We have buried the hatchet; we have smoked the calumet of peace; and, in this first council of once-hostile interests, we have founded an alliance which I trust will inaugurate a new and auspicious era in all our industries.

Mr. George W. Bond, of Massachusetts. — In my position as Chairman of the Committee on Raw Materials, I have given some attention to this subject. Our annual import of worsted goods from Great Britain is about fifty million yards; besides a very large amount, of which we have no accurate record, from France. Those from France are principally of a character for which our long merino wools are admirably well adapted. We need to make all the varieties of goods that we consume in this country, of all the varieties of wool that we produce. Had I known, before I left home, that this question was to come up in this form, I could have prepared myself with an approximate statement of the quantity required of the different kinds of wool. In round numbers, we require some fifteen million pounds of wool, in the state in which it generally comes to market. A little of the grade of wool such as it is unprofitable to grow here is grown on the plains west of the Mississippi; but the amount is trifling. The great bulk of the wool which we require is of the merino grade, which we use for our cassimeres, flannels, and delaines; and I trust, that, as we increase in the development of the length of the staple of the merino, the fabrics which the Secretary has referred to will soon be added. are being made now which I think will lead soon to their extensive manufacture. The other great branch of manufacture is that of worsted goods, of which there is a great and immensely increasing consumption, requiring a class of wool, the value of which alone seems to have been increased by the advance in cotton. We have now no hinderance to that manufacture in this country, save a supply of the raw material. As has been stated, we have hitherto imported from three to five million pounds from Canada; and from that supply we shall be cut off, if the Reciprocity Treaty is closed the coming spring. What those concerns will then do who have embarked in the manufacture, I cannot foresee. We should readily and promptly consume in this country, I think, not less than twenty million pounds of such wools, if we had the supply.

Another class of wools for which we require, for our present consumption, the equivalent of ten or fifteen million pounds, at least, of washed wool, -- say twenty to thirty million pounds in the condition in which we receive it, - are the finer wools, grown in South America, Australia, and the Cape, for the manufacture of goods requiring a close filling and superior finish, which we have been unable to obtain hitherto from any considerable amount of wool grown in this country. Some of the wools grown in Virginia, have had these qualities; and, when Virginia and East Tennessee come to be settled by Northern men. I hope we shall, from that source, and possibly from some parts of Texas, be able to obtain wools which are adapted to these uses. Until then, we must depend upon foreign markets for our supply. But it is the earnest wish of all connected with the woollen and worsted manufacture, so far as I know, that the growth of these wools should be undertaken; that experiments should be made to ascertain what part of the country is best adapted to them; and that we should have a supply of our own growth.

While I am up, I would allude to a question, the importance of which I have felt for a great many years. That is, the necessity for a careful study, scientific and practical, of the influence of climate and soil upon wool. All of us here present know that they have an immense influence. What that influence is, has never been settled, I believe, nicely, thoroughly, in this country or any other. In a country so extended as ours, with every variety of climate and soil, it is of more importance than it can be to any other nation in the world. When Professor Agassiz first established his Museum of Comparative Zoology, it was a part of his plan to connect with that institution the study of this important subject. The plan he laid out was so vast, that, in bringing it into practical order, he had not reached that when the war began. The war took off a number of young men upon whom he depended to enter with him upon this department of science, and it has thus been delayed. But I hope, when he returns, he will soon be able to take it up there; and the Institute of Technology, also, hopes to devote a part of its attention to the study of that and other matters connected with the practical arts.

Mr. R. G. HAZARD, of Rhode Island. — When I was up on a former occasion, I referred to the direct interest the wool manufacturer had in the ability of the wool-grower to produce his wool in the cheapest and most economical manner. Perhaps the wool-grower has an equal interest in the ability and skill of the manufacturer to work up the raw material into goods of the greatest possible value. And upon this subject of worsted wools, I think the producer may find encouragement in the fact that the manufacturers are acquiring skill in that direction perhaps more rapidly than in any other. Some of them have alluded to that subject, and seem discouraged in regard to their ability to produce that kind of wool. But the experiments on which this opinion is founded were probably tried when such wools were very much lower in proportion than they are now. There is, however, an important consideration connected with that; and I think it very desirable that this subject should be seen in all its bearings. That consideration is, that those kind of wools are grown upon large sheep. Now, in this country, the mutton seems to be comparatively a small object. In Great Britain, the mutton is the main object, and the wool merely an incidental production. I have no doubt, that many of their farmers, if they should hear of our keeping sheep merely for their wool, would appear as much astonished as some of ours are when they hear of Russian farmers keeping pigs for their bristles. That may affect the production of this kind of wool; but, when we become more a mutton-cating people, it may be more judicious for us to raise these large sheep.

Connected with that subject, there is a merely theoretical view, which I should like to state, and learn from practical men how far their experience bears out the theory, in regard to the size of sheep, or any other animal. We are all aware that the surface upon which the wool grows increases as the square of the linear dimensions; while the carcase, which has to be sustained to produce that wool, increases as the cube. For instance, if you begin with the linear dimension two, the square, being four, will represent the surface upon which the wool grows; the cube, which is eight, representing the carcase of the sheep which has to be sustained. Now, if you double the linear dimensions,—instead of making them two, make them four,—you have a surface upon which the wool grows of sixteen; and the cube will be sixty-four. In the one case, it is as one to two; in the other, as one to four. According to that calculation, it would seem that we ought to raise the greatest quantity of wool per acre upon small sheep.

Mr. WM. R. SANFORD, of Vermont. - I would like to ask Mr

Hayes what length of wool is necessary to produce those fabrics of which he speaks.

Mr. HAYES.—I understand that the greater the length, the more advantageously it can be used; but that a length of two and a half inches to three inches will suffice. I am speaking of fine wools. The coarse wools—the English combing-wools—should be six or eight inches in length.

The President.—I will answer Mr. Hazard's question. It is a fact universally recognized among practical producers, that small sheep have more surface in proportion to their weight than large ones.

Mr. Blanchard. — One word in regard to this coarse wool to which reference has been made. Some gentlemen here may form their estimate of the value of coarse upon the price that prevailed six or eight years ago. Let me state one fact. The wool to which our Secretary has referred is ordinarily sold to-day at seventy cents a pound. Six years ago, it would not have brought over forty-five or fifty cents.

Mr. Pottle.—I desire to say to our friends who represent the manufacturing interests here, that from the very bottom of my heart I thank them for the courtesy with which they have listened to our inquiries, and the kindness and alacrity with which they have answered them. I would also say, in behalf of the producers, that we have, to the best of our ability, tried to ascertain the wishes of the manufacturers in regard to putting up our wools, and certainly mean to try to avail ourselves of the information we have obtained here.

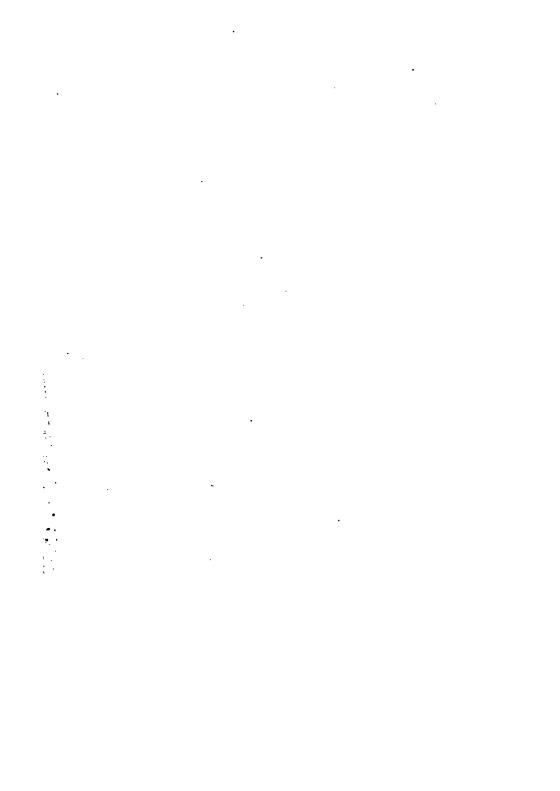
On motion of Dr. Loring, it was —

Voted, That the thanks of the Convention be tendered to the city authorities of Syracuse for their courtesy in granting the use of the City Hall for its sessions.

On motion of Mr. Pottle, it was —

Voted, That the thanks of the Convention be presented to Hon. H. S. RANDALL, for the ability and efficiency with which he has presided over its deliberations.

The Convention then, on motion of Mr. Pottle, adjourned sine die.



JOINT REPORT

THE EXECUTIVE COMMITTEE OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS,

AND OF

THE EXECUTIVE COMMITTEE OF THE NATIONAL WOOL-GROWERS' ASSOCIATION,

ADDRESSED TO

United States — Leve growers and uvel manufacture.

The United States Bebenne Commission,

FEB. 9, 1866.

BOSTON:

PRESS OF JOHN WILSON AND SONS.

1866.

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NEW-YORK CITY, Feb. 9, 1866.

To Hon. STEPHER COLWELL,

U.S. Revenue Commission, Philadelphia.

SIR,

The undersigned have been directed by the Executive Committees of the National Association of Wool Manufacturers, and of the National Wool-Growers' Association, assembled in Convention at the city of New York, on the 17th of January, 1866, and finally adjourned on this day, to present to you, as the member of the United-States Revenue Commission specially intrusted with the consideration of questions of revenue applicable to wool and woollens, the following Report.

We have the honor to be, very respectfully,

Your obedient servants,

R. W. MONTGOMERY,

President of the Convention.

JOHN L. HAYES, Secretary.



JOINT REPORT.

THE undersigned, members of the respective Executive Committees of the National Association of Wool Manufacturers, and of the National Association of Wool-growers, submit that the above-named Associations represent a large majority of the individuals and companies now engaged in the United States in the production and manufacture of wool. The undersigned, members of the Committees aforesaid, have been empowered to present to the United-States Revenue Commission the views of their respective Associations, and together represent, as fully as would be practicable by any organization, the whole woollen interest of the United States. To avoid circumlocution in the following statement, the personal pronoun plural we will be used to designate the two Executive Committees above named, acting jointly in their representation of the woollen interest of the United States.

We would, in the first place, call the attention of the Revenue Commission to the important fact, that the present is the first occasion, in the history of this country, when the woollen interest as a whole has been represented before any national body. The two great branches of this interest, agricultural and manufacturing, have been divided for fifty years, just as they were for a century in England. There were no opportunities for correcting mutual misunderstandings and imparting mutual information, so necessary for comprehending the real identity of both interests. The result was, that each branch of the

woollen industry approached the national councils, in invoking legislation, from its own point of view. The legislation, in relation to this industry, vacillated therefore as each interest predominated; and instability became its most characteristic feature, and checked its legitimate progress.

The recent formation of the National Association of Wool Manufacturers presented the first opportunity to the manufacturers as a body, to open the way to a better understanding. The government of this Association, in November last, instructed its Executive Committee to invite the several state organizations of wool-growers to meet them for consultation in relation to interests which belong to them in common, and especially to consider what answers should be made to the inquiries of the United-States Revenue Commission as regards the great wool-producing and wool-manufacturing industries.

This invitation was frankly accepted; and the representatives of both interest met in convention at Syracuse, New York, on the 18th day of December, 1865.

As the resolves and sentiments of that Convention form the basis upon which, it is hoped, that the woollen interest, as a whole, is hereafter to be represented, not only to the Commission, but the national councils, we present to the Commission copies of the resolutions passed unanimously by the Convention, and a few extracts from addresses of officers and delegates, which were received without dissent, and which indicate, with great distinctness, the sentiments of both manufacturers and wool-growers as to the basis of their future relations.

Mr. E. B. POTTLE, of New York, Chairman of the Committee on resolutions, on presenting the report of the Committee, said:—

It gives me great pleasure to say, that the series of resolutions which we shall report to this body have been agreed upon unanimously. Perfect harmony and unanimity have marked the proceedings of the Committee from beginning to end. The Committee report the following resolutions for the consideration of the Convention:—

"Resolved, That, of the great industries with which the people of the United States can occupy themselves to advantage, the woollen interest is especially commended for combining and developing in the highest degree the agricultural and mechanical resources of the nation.

"Resolved, That the mutuality of the interests of the wool producers and wool manufacturers of the United States is established by the closest of commercial bonds,—that of demand and supply; it having been demonstrated that the American grower supplies more than seventy per cent of all the wool consumed by American mills, and, with equal encouragement, would soon supply all which is properly adapted to production here; and, further, it is confirmed by the experience of half a century, that the periods of prosperity and depression in the two branches of woollen industry have been identical in time, and induced by the same general causes.

"Resolved, That as the two branches of agricultural and manufacturing industry represented by the woollen interest involve largely the labor of the country, whose productiveness is the basis of national prosperity, sound policy requires such legislative action as shall place them on an equal footing, and give them equal encouragement and protection in competing with the accumulated capital and low wages of other countries.

"Resolved, That the benefits of a truly national system, as applied to American industry, will be found in developing manufacturing and agricultural enterprise in all the States, thus furnishing markets at home for the products of both interests.

"Resolved, That it shall be the duty of the respective Executive Committees of the National Manufacturers' and National Wool-Growers' Associations to lay before the Revenue Commission and the appropriate Committee in Congress these resolutions, together with such facts and statistics as shall be necessary to procure the legislation needed to put in practical operation the propositions therein set forth."

The President of the Convention, Mr. RANDALL, a woolgrower, said:—

This convention, or conference, will, I trust, mark the introduction of a new era in some of the important relations subsisting between two great industrial interests. The American wool-producers and manufacturers have entertained differences of opinion on the subject of the respective duties which should be imposed on imported raw and manufactured wool. Those differences have led to repeated and severe

contests in Congress, in nominating conventions, and even at the polls. The whole history of our tariff legislation on this subject has been a history of sudden, and, occasionally, violent changes in measures, and even in policy. Having elsewhere attempted to trace the effects of our different woollen tariffs on the two interests most directly involved, I will not repeat myself here. But I will call your attention to one great and significant fact which has been clearly established amidst all these struggles and changes. It is that when the Government has protected the manufacturer at the expense of the producer, or the producer at the expense of the manufacturer, the injurious consequences have fallen not alone on the branch of industry discriminated against, but upon both. This was inevitable; for, in reality, their interests are indissolubly connected. Neither could possibly flourish without the other, under any circumstances which have occurred in our country, or which can reasonably be expected to occur for generations to come.

Mr. Bigelow, President of the Manufacturers' Association, said:—

As more than seventy per centum of the wool required for our vast and varied manufactures is of home growth, the interdependence of domestic wool-growing and wool manufacturing becomes apparent. Neither one of these industries can long prosper, unless the other prospers also. Taken together, they constitute an interest scarcely second in importance to any of the great industries which promote the welfare of the people, and sustain the prosperity of the nation.

This great interest owes its present growth to national legislation, and is largely dependent on the same agency for its future success. Without the equalizing aid of discriminating custom duties, we can hold no successful competition with the accumulated capital and low wages of older countries. If the woollen interest of the United States is to continue to prosper, it must be maintained in a position to contend even-handed with the woollen interest of Germany, of France, and of Great Britain.

The only contest which can give success to our efforts, lies, not between ourselves as wool-growers and wool manufacturers, but between us and the wool-growers and wool manufacturers of other nations. This is a struggle that challenges our united forces, as between ourselves there is no real ground of antagonism. On the contrary, we are one in interest, and should be allied in purpose.

Dr. LORING, a wool-grower, said: -

A recognition of the true relations which exist between the manufacturer of the East, and the wool-grower of the West and South, can alone give firmness and prosperity to each. It needs no elaborate argument to prove that the domestic market for American wool should be the best market. The same prosperity which has attended the growth of manufactures in other countries must attend their growth here. That great system of free-trade which exists between the States demands for the foundation of our domestic commerce an equal development of each section, and energy, activity, and success in each special branch of business. New York and Boston, the two great centres of manufactures, the two great wool markets of the country, offer facilities for trade, which can be found by us in no foreign port. Lowell and Lawrence, and all the manufacturing villages of the North, afford the American wool-grower his most convenient market. And it is upon the growth and vigor of this section, that the wool-producing sections of the United States must depend for their largest and most reliable, sure, and constant profits.

On the other hand, where can our mills look for the raw material, out of which to manufacture certain classes of goods, with more propriety and to better advantage than to our home production, so far as it goes? The styles of wool produced within the limits of the United States are adapted to those fabrics which we have succeeded thus far in manufacturing to the largest profit. And there is no reason why the American manufacturer should not patronize that territory included within the boundaries of his own government, by providing himself with the raw material from thence, and by availing himself, in return, of that market for his manufactured goods, which is good in proportion to the sale it meets with, for its agricultural products.

Mr. E. B. POTTLE, chairman of the Committee on Resolutions, and a wool-grower, observed:—

I desire to say, in behalf of the Committee who reported the resolutions now under discussion, that they reported them with the general expectation that we were entering upon a new era, so far as regards these two great interests, the wool-manufacturing and wool-producing interests; and I think I may add, that the general feeling all round the committee room was, that bygones should be bygones. The past cannot be recalled; and whether the present tariff bears equally upon these

two great interests or not, is a matter which cannot be determined by a resolution, however carefully drawn. But we can agree upon certain principles, — upon a common platform, where we can all stand; and on that common platform we can commence that work which we believe will be not only for our mutual interest, but for the benefit of all the interests of the country. That was the theory upon which we prepared these resolutions.

There can be no question, - it does not argue common sense in any man to get up and maintain the contrary, upon the great principles of political economy, — there can be no question, I say, that it is best for any country under heaven to produce the articles it manufactures, and manufacture the articles it produces, as far as possible. Any government that is a buyer of the products of a foreign government, when it can produce those articles itself, must of necessity be engaged in a miserable business, to the extent which it does it. As has been said by the friend who preceded me, the true wealth of a nation depends upon the products of the soil, and the labor that is bestowed in fitting those products for the use of man; and every dollar which we pay to encourage the labor of other countries, to stimulate the production of other countries, is so much taken from our own, and so much taken from the actual wealth of the country. Hence it should not be surprising, that we, who claim to be at least possessed of common sense, representing these two interests, - the wool-growing and wool-manufacturing interests of the country, -- should come here prepared to lay down, in the form of resolutions, a platform affirming simply the fact of the mutuality of these two great interests; that, looked at from a proper stand-point, - looked at from the stand-point which every good citizen should occupy, a stand-point which compels him to ask, not only for that which is best for him, but which is best for the whole country, - looked at from that stand-point, I say, no other conclusion could be come to, than that which we have put forth in these resolutions; that is, that the interests of the manufacturer and the interests of the producer are but one great mutuality, and whenever one is unduly elevated at the expense of the other, the country suffers.

Mr. Kingsbury, a manufacturer, said:—

For one, I am rejoiced to find myself here face to face with the wool-growers of the country; and I rejoice to give to you, the wool-growers of the country, my pledge, that, in time to come, we, the manufacturers, will feel that our interests are mutual, and that we can-

not sustain the one, without sustaining the other. The wool-grower and the wool manufacturer must go hand in hand; and, if we will thus go hand in hand, I believe we can procure such legislation as shall be necessary to protect your interests, and such legislation as shall be necessary to protect our interests; so that the great wool-growing and wool-manufacturing interests of the country, now larger perhaps than any other interests, shall go on in a state of prosperity beyond even our highest expectations, and we shall loom up before the world as a people unsurpassed in our manufacturing interests.

Mr. HAZARD, a manufacturer, said: -

While I am upon this point of mutuality, which I think is one of the most important we have to discuss, I will merely remark, that perhaps, from a proper point of view, we may consider the wool-growers as the manufacturers of cloth. They are engaged in the first of a series of processes by which grass and grain are converted into cloth. There are other processes more or less divided in different countries and in different sections. Sometimes the spinning is done by one man, who transfers the yarn to another to be made into cloth; and, in England, it is quite common for the maker of the cloth to transfer it to the finisher, to be colored and finished. Now, I say we can no more separate the interest of the wool-grower and the wool manufacturer in this country, than we can separate the interest of the spinner from that of the maker of the cloth, or that of the maker of the cloth from that of the finisher: they are indissolubly united together.

In the spirit of these resolutions and sentiments, we propose now to state the present condition and necessities of the woollen interest of the United States.

The number of sets of machinery or series of cards—a set forming the unit for calculation in woollen machinery—employed in the United States, reported to the Manufacturers' Association on the 25th of October, 1865, was 4,100. The estimated number in the United States, as all were not reported, is 5,000. The distribution and weekly consumption of foreign and domestic wool appear in the following table:—

STATEMENT OF AGGREGATE RESULTS,

OBTAINED UP TO OCTOBER 25, 1865.

In Reply to Circulars of Feb. 24, 1865, and May 30, 1865, addressed to Wool Manufacturers.

8 T A T E S.	Returns Re- ceived.	Sets Re- ported.	Weekly Consumption of Beoured Wool, in Pounds	Weekly Consumption of Domestic Wool, in Pounds.	Weekly Consumption of Foreign Wood, in Pounds,	Per- ominge of Foreign Wook	Average Weekly per Set.	MSE to b bean from
MAINE	40	177	98,885	74,120	19,715	19	580	11
New Hampshire	69	861	217,110	174,841	42,299	191	601	28
Vermont	89	112	50,217	82,652	17,565	85	448	19
MASSACHUSETTS	186	1,467	857,496	560,896	297,100	841	585	74
RHODE ISLAND	61	840	188,775	152,967	85,808	19	555	16
Connecticut	88	452	252,880	125,486	127,894	50}	559	41
New York	154	576	236,510	174,586	61,974	26 <u>1</u>	411	124
New Jersey	11	64	88,660	25,238	8,422	25	596	7
Pennsylvania:								
Philadelphia	24	68	88,200	68,650	19,550	224	1,297	96
Remainder of the State .	57	90	89,054	89,054			484	•
DELAWARE	6	15	14,050	18,050	1,000	7#	967	4
MARTLAND	1	8	5,400	2,700	2,700	50	675	2
West Virginia		••						1
Оню	44	88	82,615	82,615			803	84
INDIANA	47	108	51,200	51,200			497	41
Illinois	22	47	28,855	28,855			497	13
Michigan	20	26	9,660	9,660		,.	872	13
Wisconsin	18	25	10,800	10,800			432	•
MINNESOTA	1	2	1,200	1,200			600	1
Iowa	15	48	17,658	17,658			411	•
Missouri	10	21	16,650	16,650			798	4
KENTUCKY	7	14	6,600	6,600			40ò	7
KANSAS	1	8	1,620	1,620		. .	540	1
California								1
Oregon	1	4	4,000	4,000			1,000	1
NEBRASKA TERRITORY								
Total, Oct. 25, 1865	917	4,100	2,252,545	1,619,088	688,497	284	550	-

The Value of the Woollen Manufacture is shown in the following

TABLE,

Showing the Value of Woollen Goods manufactured in the United States, for the Year ending June 30, 1864. Calculated from Official Report of United States Commissioner of Internal Revenue.

8 T A T E S.	Manufacturers of WOOL not otherwise pro- vided for.	Cloths, and all Textile, Knitted or Felted Fabrics of WOOL, before dyed, printed, or prepared in any other manner.	Manufacturers of WOESTED not otherwise pro- vided for.	TOTAL
Manra	Dollars. 8,288,098.67	Dollars. 288,885.00	Dollara.	Dollars. 8,476,488.67
New Hampshire	9,044,762.00	84,915.00		9,079,677.00
Vermost	8,145,988.67	562,788.00		8,708,721.67
MASSACHUSETTS	88,905,899.00	800,581.88	897,720.67	40,608,651.00
RHODE ISLAND	2,968,154.88	7,668,581.67	261,014.88	10,892,700.88
COMMECTICOT	11,878,768.67	8,918,965.00	78,912.88	15,866,641.00
New York	10,850,180.00	2,214,802.67	912,792.88	18,977,775.00
New Jersey	2,752,652.00	25,861.67	70.88	2,778,084.00
PRHESYLVANIA	18,022,447.88	8,502,190.00	75,076.00	16,599,718.88
DELAWARE	548,184.67			548,184.67
MARYLAND	450,885.88	1,526.67		451,912.00
WEST VIRGINIA	58,486.00	5,267.00		68,758.00
KRHTUCKY	117,584.88	242,870.67		859,905.00
Missouri	72,980.00	2,864.00		75,844.00
Ожно	1,815,248.00	85,684.67	·	1,400,877.67
INDIANA	545,128.88	11,794.88	1,692.67	558,615.88
lilinois	841,907.00	11,884.00	5,798.88	859,084.88
Місніван	118,094.00	88,754.88		151,848.88
Wiscorsin	104,457.67	860.00		105,817.67
Iowa	102,815.67	15,489.67		118,305.38
Міживаота	8,696.00	450.00		9,146.00
Karsas	14,947.67			14,947.67
CALIFORNIA	588,956.00			588,956.00
Овесон	128,620.67			128,620.67
MEBRASKA TERRITORY	45.67			45.67
				121,868,250.88

This sum of about one hundred and twenty-two millions approximatively represents the whole value of the wool product of the United States for the year stated, the whole being consumed in our mills; also the wool imported, the labor of manufacturing operatives, the interest of capital employed in manufactures, the wear and tear of machinery, and the profits of manufactures. No argument is necessary to show the national importance of an industry represented by such imposing figures.

The country has not only gained by the addition of this large sum to the national resources, but has been greatly benefited by the superiority of American fabrics. In a class of fabrics, entering perhaps more largely than any other into general consumption, — that of flannels, — the superiority due principally to the admirable adaptation of the common wools of this country, their strength and spinning qualities is so marked as almost wholly to exclude the foreign flannels. American fancy cassimeres compare favorably in finish, fineness, and strength, with those imported. Our delaines, owing again, in a great measure, to the excellence of our merino combing wool, surpass the fabrics of Bradford at the same price. The excellence of American shawls was admitted at the Great Exhibition in London. The dealers in American and English carpets testify that the American carpets are preferred by the best judges. The worsted manufacture, although introduced within only six years, supplies yarns, braids, bindings, hosiery goods, alpaca fabrics, and curtain stuffs, of such excellence as to startle even the Bradford manufacturers, and have attained, in the brief period of six years, a yearly value of ten millions. The broadcloth manufacture, although so long suspended, has been revived, and goods exhibited at recent mechanic fairs have been declared the rivals of the best German fabrics. asserted by the manufacturers, that with proper relief against foreign competition, and a due supply of raw material, we can pursue with success every branch of the manufacture of woollens and worsteds, and can supply at least nine-tenths of our own consumption.

To the development of the woollen interests in this country in all its branches, we owe our independence of foreign nations, in the supply of the most important material to our army during the late war. By our own looms, we furnished in one year not less than thirty-five million garments to our soldiers, and supplied cloths for the army and navy in three years, made in our own mills, which consumed two hundred million pounds of wool. Of the cloths thus furnished, an Assistant-Quartermaster-General of the army, in charge of these supplies, officially says, "It has been demonstrated that American army cloths are much stronger than those in use in the armies of Europe."

The sheep husbandry in the United States has partaken of the vacillations which have attended the woollen manufacture, and has exhibited a decided and stable progress only within the last five years. The number of sheep in the United States, as shown by the census of 1860, was 1,505,810, and the product of wool at that period was 60,264,918 pounds. The present number is estimated at not less than thirty millions; and the quantity of wool at present produced in the United States is estimated at ninety-five million pounds.

The development of a home production of wool has been regarded of paramount importance by all enlightened governments. It has been the experience of all nations, that the domestic supply of this raw material has been the first, and always the chief dependence of its manufactures, and the peculiar character of this material has impressed itself upon the fabrics which each country has produced. Thus, in the fine wools of Saxony and Silesia, we have the source of German broadcloths; in the combing wools of England, the worsteds of Bradford; and, in the long merino wools of France, the origin of her thibets and cashmeres. The peculiar excellences of American wools have given origin to our flannels, our cassi-

meres, our shawls, and our delaines; and they give strength and soundness to all the fabrics into which they enter. In breeding sheep, the American growers have made improvements which may be favorably compared with those of Bakewell and Elman, in England. They have converted the light-boned and. imperfectly covered merinos, as they were when first imported from Spain, into large, round, low, strong-boned sheep, models of compactness and beauty. The excellence of the American breed has been recognized in Europe; sheep of the American improved merino breed having received at the International Exhibition at Hamburg, among three hundred and fifty competing from Austria, Prussia, Germany, and France, prizes which placed them in the first rank of those exhibited. The manufacturers acknowledge that American wools, as a whole, waste less than foreign wools, as now imported. While four pounds of Mestizo wool are required to make a pound of finished cloth, only two and a sixth pounds of American wools are required for the pound of finished cloth. Our domestic wools are sound, strong, and distinguished for their spinning qualities. They are invariably preferred for the warp, upon which the strength of fabrics mainly depend. The great majority of the manufacturers of this country use domestic wool alone. Of 4,073 sets, 2,171 are employed wholly upon domestic wool. Of 981 mills, 767 use domestic wool principally, while only forty-six mills in the whole country use foreign wool alone.

Of all the scoured wool used in the woollen mills of the United States, over seventy per cent is of home growth. Cut off the supply of American wool, and our mills are stopped as effectually as by turning the water from the wheels which move them. We declare, therefore, with the utmost emphasis, that American wools are eminently the foundation of the prosperity of our manufactories.

While giving this pre-eminence to the domestic product, it is our duty to remove the impression, prevailing to a considerable extent, that this country can now, or in a brief period, supply economically all the varieties of wool required in existing manufactures. Long, coarse, cheap wools, such as are not produced in this country, and cannot probably ever be raised with profit, are consumed in the manufacture of carpets. Combing wools, required in the manufacture of worsted, are produced in this country, only to a very limited extent. The domestic supply of very fine short cloth wools, required in the manufacture of broadcloth and face goods, is at present inadequate to the necessities of the manufacture; and a moderate supply of these wools, to be mixed with our own, would increase the consumption of American wools.

While it is admitted that the duties on wool should be at least sufficient to place the American producer upon equal terms with the foreign producer of wools competing with his own, it is our duty to express the opinion that only moderate duties should be placed upon wools which do not compete with our own, and that absolutely prohibitory duties would be injurious to the manufacturer, and indirectly injurious to the woolgrower.

The resolutions which we are directed to submit to the Commission declare, "that sound policy requires such legislative action as shall give them, (the wool-grower and wool manufacturer,) equal encouragement and protection, in competing with the accumulated capital and low wages of other countries." We would, therefore, call the attention of the Commission to some facts and considerations, having a peculiar bearing upon our own industries in the relations above indicated.

In the production of wool most directly competing with his own,—the Mestizo merino wool,—the farmer of this country, with all the demands upon him imposed by American civilization; with school, town, county, and United-States revenue taxes; with wages doubled by the war; and compelled, by the rigor of the climate, to house and feed his sheep more than half the year,—must compete with the flock-master of the pampas of La Plata, where food is furnished spontaneously

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during the whole year; where the sheep are never housed or fed by hand; where taxes are inconsiderable, and where wages are reduced to the mere demands of physical subsistence.

The manufacturer, on his part, has to contend chiefly with the looms of Belgium, Germany, and France, which supply the greater portion of our foreign woollen fabrics. M. Bernoville, in a very careful work upon the woollen industry of France, estimates the average pay of 320,000 workmen, employed in the woollen manufacture, at one franc twenty-five centimes per day, for three hundred days' work, or twenty-five cents per day. The wages paid to the persons employed in manufactures in Belgium, as obtained from the "Statistique generale de la Belgique," are, in the woollen manufacture, as follows:—

Men ave	rage	•							•	32	cents	per	day.
\mathbf{Women}	"		•		•	•	•			18	"	"	39
Boys	"	•		•		•				13	87	"	"
Girls	••									12		••	••

The hours of labor, twelve to fourteen per day.

The average rates of interest from 1846 to 1860, as shown in tables of admitted accuracy, in Europe and this country, are as follows: — In England 3.90, in France 4.10, in the United States 9.12; the interest in this country being more than double the average on the other side. The cost of constructing a manufacturing establishment in Europe is shown, by reliable statements, to be one-half the cost of an establishment on this side. The cost of an establishment abroad being one-half, and the rate of interest less than one-half, the result is that the capital required for manufactures in this country is four times that required by our rivals in Europe.

We present these facts without any further argument as to the necessity of relief against foreign competition.

The question next arises as to our position under the present laws.

It is our duty to the Revenue Commission, as well as to the several interests which we represent, to submit at length our

views of the operation of the present tariff laws, in their application to the production and manufacture of wool.

In order to understand clearly the object sought for in adjusting the present tariff on wool and woollens, it will be necessary to consider the operation of the two preceding tariffs; viz., those of 1846 and 1857, each of which having proved to be defective in opposite directions, suggested changes which were necessary to perfect a system equitably adjusted to the two branches of the woollen interest.

The tariff of 1846 placed, in the main, a duty of thirty per cent upon both wool and woollens; and, in some cases, a less duty upon the latter than upon the former. This arrangement was justified to popular opinion by its apparent equality. But the equality existed only in name. The grower of the wool had the full benefit of the protection of thirty per cent, without any drawbacks or neutralizing duties; and the arrangement would have proved most beneficial to him, at least, if the manufacturer had continued to consume his wool. But the manufacturer, being the consumer of wool, had to pay the whole of the duty of thirty per cent by which the grower was protected, which, when deducted from the duty on the manufactured article, left him a protection so inconsiderable as to be unavailing. Burdened with this heavy duty, and receiving no equivalent, he had to contend with a foreign rival, who had the vast advantage of obtaining his wool without duty. Waiving argument upon the theoretical question of the equality or justice of this arrangement, it is sufficient to refer to the practical fact, that the system, whether sound or not in theory, proved most disastrous in its actual results to both interests.

The manufacturers, encouraged by the policy of the tariff of 1842, had attempted the branches of manufacture requiring the utmost skill, and demanding large capital and expensive establishments. No less than eighteen hundred looms were in operation in the manufacture of broadcloths. The woolgrowers, encouraged by the demand for the finest cloth-wools

required in this manufacture, imported Saxony sheep, and had made progress in the growth of the finest wools, distinguished in Germany as noble wools, which, if continued, would have placed this country at the present time on an equality with Silesia in the production of such wools. The manufacturers of fine cloths found it in vain to struggle against foreign rivals, who, in addition to cheap interest and cheap labor, had the crowning advantage of free wool. The higher branches of the manufacture were abandoned, soon every one of the eighteen hundred of the broadcloth looms in the country ceased work. The only branches of manufacture continued with activity were those like flannels, which were supplied by the common wool of the country, -- so superior in its spinning qualities as in itself to afford an advantage over the foreign manufacture. There was no longer a demand for any but common wools. The Saxon-wool husbandry ceased with the manufacture of fine cloths, which had called it into existence.

When we consider the position which Germany now has in the growth of the finer wools and the manufacture of broadcloths,—supplying the whole world with the products of her flocks and looms,—and remember that the corresponding industries of this country, if not checked by unwise though apparently equitable legislation, would have advanced in a geometrical ratio, we must regard the blow which prostrated alike the wool-grower and the wool manufacturer as one of the most disastrous that has ever fallen upon the industries of our country.

Armed with arguments, derived from the state of things above described, against giving preponderating consideration to the wool-grower, the manufacturers, on their side, approached the national councils, and invoked legislation which should regard their interest as the predominating one of the country. The result was the passage of the Tariff Bill of 1857, which imposed a merely nominal duty upon wool, and protected the manufacturer by a duty of twenty-four per cent. This tariff,

although temporarily advantageous to the manufacturer, did not continue long enough in operation to furnish facts as to its effect upon both interests, such as a longer experience under the tariff of 1846 had afforded. The obvious disadvantage to the manufacturer of the policy of the tariff of 1857 was its inherent instability.

The manufacturer investing large capital in structures and machinery which cannot be diverted to other purposes, and which may not give returns until years of operation, demands above all things stability of legislation. This he could never expect under a system which made the agricultural interest secondary to his.

Influenced by these considerations, and candidly acceding to the reclamations of the wool-growers, the manufacturers cordially responded to the proposal of the Committee of Ways and Means of the thirty-seventh Congress; and particularly of the subcommittee, presided over by the distinguished member from Vermont, whose name is identified with the policy mainly due to his influence, to so adjust the tariff upon wool and woollens as to give not merely nominal but absolute equality to both branches of the woollen interest.

Whatever may have been the practical working of the Morrill tariff, which is the basis of our present system, it is a matter of history, that equality of adjustment was the main object of the provisions of that bill and the Tariff Bill of 1864, respecting wool and woollens.

The object sought in these bills was to give a sufficient protection to the wool-grower, and to place the manufacturer in the same position as if he had his wool free of duty. A duty supposed to be sufficient to protect the wool-grower against wools competing with his own was placed upon such wools, and such a specific duty was placed upon woollen cloths as was supposed to be sufficient to reimburse the manufacturer for the amount of the duty paid on the wools. The ad-valorem duty on the cloths was added to reimburse to the manufacturer the

expenses of carrying the duty on the wools, the internal taxes, the duties on drugs and other materials used in manufacture, and to furnish the required protection.

While recognizing fully the correctness of the principles upon which the present tariff laws are based, it is our duty to point out defects in their practical operation. It has been proved by official returns, that, while it was the manifest intent of the law of 1864 that the minimum rate of duty upon the class of wools most directly competing with our own should be six cents per pound, the average rate of duty upon this class of wools actually paid has been less than five cents per pound. The American producer has been thus deprived of the intended protection.

In view of the facts above stated, and of the requirements of our manufactures for an increased supply of American wool, and in order to furnish a stimulus for such supply, and, at the same time, to secure "equal encouragement and protection to both interests," we recommend as a basis for the re-adjustment of the revenue laws applicable to wool and woollens, the following propositions:—

- 1. A provision to be inserted in the tariff laws requiring all wools now known as Mestizo, Metz, Cape, and Australian wools to be subjected to a duty of not less than ten cents per pound and ten per cent ad valorem; said provision to be so worded as most effectually to prevent these and similar wools from being admitted at a less rate of duty; the rates of duty on all other wools to remain as they now are, with the exception of wools the growth of Canada, which, in the absence of treaty stipulations, shall be subjected to a duty of (blank) cents per pound.
- 2. All manufactures composed wholly or in part of wool or worsted shall be subjected to a duty which shall be equal to twenty-five per cent, net; that is to say, twenty-five per cent after reimbursing the amount paid on account of duties on wool, dye-stuffs, and other imported materials used in such

manufactures, and also the amount paid for the internal revenue tax imposed on manufactures, and upon the supplies and material used therefor.

E. B. BIGELOW,
T. S. FAXTON,
EDWARD HARRIS,
J. W. EDMANDS,
S. W. CATTELL,
H. KINGSBURY,
THEODORE POMEROY,

Executive Committee of the National Association of Wool Manufacturers.

HENRY S. RANDALL, E. B. POTTLE, E. HAMMOND, R. M. MONTGOMERY, GEORGE B. LORING,

Executive Committee of the National Wool-Growers' Association.

JOHN L. HAYES,

Secretary of the Joint Committee.



JOINT REPORT.

THE undersigned, members of the respective Executive Committees of the National Association of Wool-growers, submit that the above-named Associations represent a large majority of the individuals and companies now engaged in the United States in the production and manufacture of wool. The undersigned, members of the Committees aforesaid, have been empowered to present to the United-States Revenue Commission the views of their respective Associations, and together represent, as fully as would be practicable by any organization, the whole woollen interest of the United States. To avoid circumlocution in the following statement, the personal pronoun plural we will be used to designate the two Executive Committees above named, acting jointly in their representation of the woollen interest of the United States.

We would, in the first place, call the attention of the Revenue Commission to the important fact, that the present is the first occasion, in the history of this country, when the woollen interest as a whole has been represented before any national body. The two great branches of this interest, agricultural and manufacturing, have been divided for fifty years, just as they were for a century in England. There were no opportunities for correcting mutual misunderstandings and imparting mutual information, so necessary for comprehending the real identity of both interests. The result was, that each branch of the

woollen industry approached the national councils, in invoking legislation, from its own point of view. The legislation, in relation to this industry, vacillated therefore as each interest predominated; and instability became its most characteristic feature, and checked its legitimate progress.

The recent formation of the National Association of Wool Manufacturers presented the first opportunity to the manufacturers as a body, to open the way to a better understanding. The government of this Association, in November last, instructed its Executive Committee to invite the several state organizations of wool-growers to meet them for consultation in relation to interests which belong to them in common, and especially to consider what answers should be made to the inquiries of the United-States Revenue Commission as regards the great wool-producing and wool-manufacturing industries.

This invitation was frankly accepted; and the representatives of both interest met in convention at Syracuse, New York, on the 13th day of December, 1865.

As the resolves and sentiments of that Convention form the basis upon which, it is hoped, that the woollen interest, as a whole, is hereafter to be represented, not only to the Commission, but the national councils, we present to the Commission copies of the resolutions passed unanimously by the Convention, and a few extracts from addresses of officers and delegates, which were received without dissent, and which indicate, with great distinctness, the sentiments of both manufacturers and wool-growers as to the basis of their future relations.

Mr. E. B. POTTLE, of New York, Chairman of the Committee on resolutions, on presenting the report of the Committee, said:—

It gives me great pleasure to say, that the series of resolutions which we shall report to this body have been agreed upon unanimously. Perfect harmony and unanimity have marked the proceedings of the Committee from beginning to end. The Committee report the following resolutions for the consideration of the Convention:—

"Resolved, That, of the great industries with which the people of the United States can occupy themselves to advantage, the woollen interest is especially commended for combining and developing in the highest degree the agricultural and mechanical resources of the nation.

"Resolved, That the mutuality of the interests of the wool producers and wool manufacturers of the United States is established by the closest of commercial bonds,—that of demand and supply; it having been demonstrated that the American grower supplies more than seventy per cent of all the wool consumed by American mills, and, with equal encouragement, would soon supply all which is properly adapted to production here; and, further, it is confirmed by the experience of half a century, that the periods of prosperity and depression in the two branches of woollen industry have been identical in time, and induced by the same general causes.

"Resolved, That as the two branches of agricultural and manufacturing industry represented by the woollen interest involve largely the labor of the country, whose productiveness is the basis of national prosperity, sound policy requires such legislative action as shall place them on an equal footing, and give them equal encouragement and protection in competing with the accumulated capital and low wages of other countries.

"Resolved, That the benefits of a truly national system, as applied to American industry, will be found in developing manufacturing and agricultural enterprise in all the States, thus furnishing markets at home for the products of both interests.

"Resolved, That it shall be the duty of the respective Executive Committees of the National Manufacturers' and National Wool-Growers' Associations to lay before the Revenue Commission and the appropriate Committee in Congress these resolutions, together with such facts and statistics as shall be necessary to procure the legislation needed to put in practical operation the propositions therein set forth."

The President of the Convention, Mr. RANDALL, a woolgrower, said: —

This convention, or conference, will, I trust, mark the introduction of a new era in some of the important relations subsisting between two great industrial interests. The American wool-producers and manufacturers have entertained differences of opinion on the subject of the respective duties which should be imposed on imported raw and manufactured wool. Those differences have led to repeated and severe

contests in Congress, in nominating conventions, and even at the polls. The whole history of our tariff legislation on this subject has been a history of sudden, and, occasionally, violent changes in measures, and even in policy. Having elsewhere attempted to trace the effects of our different woollen tariffs on the two interests most directly involved, I will not repeat myself here. But I will call your attention to one great and significant fact which has been clearly established amidst all these struggles and changes. It is that when the Government has protected the manufacturer at the expense of the producer, or the producer at the expense of the manufacturer, the injurious consequences have fallen not alone on the branch of industry discriminated against, but upon both. This was inevitable; for, in reality, their interests are indissolubly connected. Neither could possibly flourish without the other, under any circumstances which have occurred in our country, or which can reasonably be expected to occur for generations to come.

Mr. Bigelow, President of the Manufacturers' Association, said:—

As more than seventy per centum of the wool required for our vast and varied manufactures is of home growth, the interdependence of domestic wool-growing and wool manufacturing becomes apparent. Neither one of these industries can long prosper, unless the other prospers also. Taken together, they constitute an interest scarcely second in importance to any of the great industries which promote the welfare of the people, and sustain the prosperity of the nation.

This great interest owes its present growth to national legislation, and is largely dependent on the same agency for its future success. Without the equalizing aid of discriminating custom duties, we can hold no successful competition with the accumulated capital and low wages of older countries. If the woollen interest of the United States is to continue to prosper, it must be maintained in a position to contend even-handed with the woollen interest of Germany, of France, and of Great Britain.

The only contest which can give success to our efforts, lies, not between ourselves as wool-growers and wool manufacturers, but between us and the wool-growers and wool manufacturers of other nations. This is a struggle that challenges our united forces, as between ourselves there is no real ground of antagonism. On the contrary, we are one in interest, and should be allied in purpose.

Dr. LORING, a wool-grower, said: -

A recognition of the true relations which exist between the manufacturer of the East, and the wool-grower of the West and South, can alone give firmness and prosperity to each. It needs no elaborate argument to prove that the domestic market for American wool should be the best market. The same prosperity which has attended the growth of manufactures in other countries must attend their growth here. That great system of free-trade which exists between the States demands for the foundation of our domestic commerce an equal development of each section, and energy, activity, and success in each special branch of business. New York and Boston, the two great centres of manufactures, the two great wool markets of the country, offer facilities for trade, which can be found by us in no foreign port. Lowell and Lawrence, and all the manufacturing villages of the North, afford the American wool-grower his most convenient market. And it is upon the growth and vigor of this section, that the wool-producing sections of the United States must depend for their largest and most reliable, sure, and constant profits.

On the other hand, where can our mills look for the raw material, out of which to manufacture certain classes of goods, with more propriety and to better advantage than to our home production, so far as it goes? The styles of wool produced within the limits of the United States are adapted to those fabrics which we have succeeded thus far in manufacturing to the largest profit. And there is no reason why the American manufacturer should not patronize that territory included within the boundaries of his own government, by providing himself with the raw material from thence, and by availing himself, in return, of that market for his manufactured goods, which is good in proportion to the sale it meets with, for its agricultural products.

Mr. E. B. POTTLE, chairman of the Committee on Resolutions, and a wool-grower, observed:—

I desire to say, in behalf of the Committee who reported the resolutions now under discussion, that they reported them with the general expectation that we were entering upon a new era, so far as regards these two great interests, the wool-manufacturing and wool-producing interests; and I think I may add, that the general feeling all round the committee room was, that bygones should be bygones. The past cannot be recalled; and whether the present tariff bears equally upon these

two great interests or not, is a matter which cannot be determined by a resolution, however carefully drawn. But we can agree upon certain principles, — upon a common platform, where we can all stand; and on that common platform we can commence that work which we believe will be not only for our mutual interest, but for the benefit of all the interests of the country. That was the theory upon which we prepared these resolutions.

There can be no question, — it does not argue common sense in any man to get up and maintain the contrary, upon the great principles of political economy, — there can be no question, I say, that it is best for any country under heaven to produce the articles it manufactures, and manufacture the articles it produces, as far as possible. Any government that is a buyer of the products of a foreign government, when it can produce those articles itself, must of necessity be engaged in a miserable business, to the extent which it does it. As has been said by the friend who preceded me, the true wealth of a nation depends upon the products of the soil, and the labor that is bestowed in fitting those products for the use of man; and every dollar which we pay to encourage the labor of other countries, to stimulate the production of other countries, is so much taken from our own, and so much taken from the actual wealth of the country. Hence it should not be surprising, that we, who claim to be at least possessed of common sense, representing these two interests, - the wool-growing and wool-manufacturing interests of the country, - should come here prepared to lay down, in the form of resolutions, a platform affirming simply the fact of the mutuality of these two great interests; that, looked at from a proper stand-point, - looked at from the stand-point which every good citizen should occupy, a stand-point which compels him to ask, not only for that which is best for him, but which is best for the whole country, - looked at from that stand-point, I say, no other conclusion could be come to, than that which we have put forth in these resolutions; that is, that the interests of the manufacturer and the interests of the producer are but one great mutuality, and whenever one is unduly elevated at the expense of the other, the country suffers.

Mr. Kingsbury, a manufacturer, said:—

For one, I am rejoiced to find myself here face to face with the wool-growers of the country; and I rejoice to give to you, the wool-growers of the country, my pledge, that, in time to come, we, the manufacturers, will feel that our interests are mutual, and that we can-

not sustain the one, without sustaining the other. The wool-grower and the wool manufacturer must go hand in hand; and, if we will thus go hand in hand, I believe we can procure such legislation as shall be necessary to protect your interests, and such legislation as shall be necessary to protect our interests; so that the great wool-growing and wool-manufacturing interests of the country, now larger perhaps than any other interests, shall go on in a state of prosperity beyond even our highest expectations, and we shall loom up before the world as a people unsurpassed in our manufacturing interests.

Mr. HAZARD, a manufacturer, said: -

While I am upon this point of mutuality, which I think is one of the most important we have to discuss, I will merely remark, that perhaps, from a proper point of view, we may consider the wool-growers as the manufacturers of cloth. They are engaged in the first of a series of processes by which grass and grain are converted into cloth. There are other processes more or less divided in different countries and in different sections. Sometimes the spinning is done by one man, who transfers the yarn to another to be made into cloth; and, in England, it is quite common for the maker of the cloth to transfer it to the finisher, to be colored and finished. Now, I say we can no more separate the interest of the wool-grower and the wool manufacturer in this country, than we can separate the interest of the spinner from that of the maker of the cloth, or that of the maker of the cloth from that of the finisher: they are indissolubly united together.

In the spirit of these resolutions and sentiments, we propose now to state the present condition and necessities of the woollen interest of the United States.

The number of sets of machinery or series of cards—a set forming the unit for calculation in woollen machinery—employed in the United States, reported to the Manufacturers' Association on the 25th of October, 1865, was 4,100. The estimated number in the United States, as all were not reported, is 5,000. The distribution and weekly consumption of foreign and domestic wool appear in the following table:—

Worsted Princettas.
Alepines.
Queen's Cloth.
Worsted figured Russells.
Union " "
Silk warp " "
Worsted Serge de Berrie.
Union Serge de Berrie.
Shalloons.
Plain Shotts.
Figured striped Shotts.
Says, stout make.
Says, Merino make.

Mixed Stockinetts.
Grandville ,,
Webbings.
Summer Cloths.
Stout Orleans.
Denmark Latteens.
Wildbores.
Tammies.
Tournay Cloths.
Chipa Cloth.
Pelliones.
Ponchos and Mantas.
Yergas.

The importance of the manufacture is evinced by the fact, that the worsted manufacture employed in England, in 1856, 87,794 persons; while the cardwool manufacture employed only 79,091. In France, this industry employed, in 1851, 300,000 persons. In this country, in 1860, less than 3,000 were employed. Worsted goods constitute the largest part of our importations. Of sixty millions of woollens and worsteds, forty millions were of worsted alone.

The manufacture of worsteds, which is just begining to have an important development in this country, owes its existence to the Reciprocity Treaty, which admitted, free of duty, the wools of Canada. The farmers of Upper Canada, of English and Scotch descent, naturally prejudiced in favor of the sheep husbandry which prevails at home,—as England is still called in the colonies,—and having a taste for English mutton, imported sheep of the Leicester, Cotswold, and Down races, which have thriven admirably on the naturally rich limestone soils of Upper Canada.

The present production of wool from these sheep in Canada is about six millions of pounds. The Canadians have no fine-woolled sheep. Protected by a tariff, they consume about two millions of their own wool in the manufacture of coarse cloths, including tweeds, which have been imported largely into the United States, notwithstanding the duty on cloths; and we use the balance of from three to five millions.

I have before me an approximative estimate, made by a worsted manufacturer in June, of the amount of combing-wools required for our principal mills, which is as follows:—

Pacific Mills, Lawrence, stuff-goods, granadines	800,000	lbs.
Other mills in Lawrence	200,000	99
Hamilton Company, Lowell, stuff-goods	800,000	**
Lowell Carpet Company, stuff-goods	250,000	22
Abbot Worsted Company, yarns	200,000	**
James Dugdale, Lowell, yarns	. 150,000	"
	100,000	**
John Saydan, Lowell, yarns	75,000	"
Craven & Moore, Westford, yarns	. 110,000	
American Braid Company, Pawtucket, R.I., yarns and	1	
braids	100,000	**
Goff & Son, Pawtucket, R.I., yarns and braids	. 75,000	22
Valley Worsted Company, Providence, R.I., fancy		
hosiery and braids	250,000	22
Kalmia Mills, Connecticut, worsted damasks, broca-	•	
telles, &c	. 150,000	"
John Yewdell, Philadelphia, yarns	. 100,000	99
Samuel Yewdell, Philadelphia, yarns	. 150,000	29
Thornton, Troy, N.Y., yarns	50,000	29
Aberdeen, near Patterson, N.J., yarns	. 50,000	29
Bigelow Carpet Company, white yarns	. 100,000	"
Manchester Print-Works, for stuff-goods bought last	,	-
year	. 300,000	"
	2,900,000	lbs.

The amount ascertained to have been used in other mills not included in this estimate, will carry the present yearly consumption of Canada wools to at least four million pounds.

As the American production of worsted combingwool is not sufficient to supply one mill, if the treaty should not be renewed, or some provision be made for the free admission of Canada wools, the worsted manufacturer will be compelled to pay the *whole* of the present high duty on wools, of the class consumed by him, from which his foreign rival is exempt.

The wool adapted to the worsted manufacture cost now in Canada, in gold, from forty to forty-five cents. The duties, under the present tariff, are on wools over thirty-two cents, twelve cents, and ten per cent ad If the present tariff should operate on valorem. Canada wools, the duties on wools commonly used at present prices would range from forty to thirtyseven per cent. It is shown by the sworn statements of manufacturers submitted herewith, that these duties on the raw material, together with other neutralizing duties, such as the internal revenue tax, would reduce the nominal protection of from thirty-five to fifty per cent; the duty on foreign worsteds, to an actual protection ranging from zero to only four per It is vain to suppose that worsted manufacture can be continued or increased under such disadvantages.

A duty on Canada wools would crush an industry which has already assumed a truly national importance, and has advanced with a rapidity unexampled in any branch of our textile manufactures. It is shown by the statements under oath of four leading manufacturers herewith submitted (see statement of Samuel Fay and others), "that worsted yarns, of the finer grades, were made in this country only to a very limited extent prior to 1860 or 1861, except for delaines. The introduction of the manufacture of the finer worsted yarns is due to the command of Canada wools, admitted free under the Reciprocity Treaty. We estimate the capital, now employed in the manufacture of the various kinds of worsted goods, at eight million dollars; and the yearly value of the product, at not less than ten million dollars. We do not hesitate to say, that, in our opinion, the whole of this manufacture is dependent upon the supply of Canada wool; and that, if Canada wool should be subjected to duties ruling under the present tariff, the greater part of this manufacture would be suspended."

Mr. Morse, a leading manufacturer of braids, says, in his sworn statement, herewith submitted: "The first manufacture of worsted braid in this country was commenced, in 1860, with sixteen English machines. We estimate that three thousand machines for braiding worsted are now in operation in this country, that the operation of these machines requires a capital of one million dollars, and that the annual value of the product is three millions. With the present supply of yarns, and the present machinery, it is impossible to supply the demand. We have orders to-day for a hundred thousand dozen of braids ahead of our production. The existence of this manufacture

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To Hon. STEPHEN COLWELL,

U.S. Revenue Commission, Philadelphia,

SIR,

The undersigned, Members of the Executive Committee of the National Association of Wool Manufacturers, have the honor to submit to you, as the member of the Revenue Commission specially entrusted with the consideration of the questions of revenue applicable to wool, woollens, and worsteds, the following "statement of facts relative to Canada wools and the manufactures of worsted," prepared by the Secretary of the Association above named, and to commend the facts and views therein presented to your special attention.

We have the honor to be, very respectfully, your obedient servants,

E. B. BIGELOW,
T. S. FAXTON,
EDWARD HARRIS,
J. W. EDMANDS,
N. KINGSBURY,
THEODORE POMEROY,
S. W. CATTELL,

Executive Committee, &c.

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NATIONAL ASSOCIATION OF WOOL MANUFACTURERS, OFFICE, 55, SUMMER STREET, BOSTON, MASS., Jan. 18, 1866.

To the Executive Committee of the National Association of Wool Manufacturers.

GENTLEMEN, — I have the honor to call your attention to a statement of facts in relation to the demand for consumption in American manufactures of the class of wools known as "combing-wools," as distinguished from card or cloth wools.

The former class are wools specially fitted for the process of combing by hand or machinery, which consists in drawing out the fibres, so that they may be straight and parallel; the shorter portions called "noils" being removed by this operation. The fibres having been rendered straight and parallel, are twisted, and the yarn is called worsted. The ends of the fibre being covered by the process of spinning, the yarns are smooth and lustrous.

Card or cloth wool is wool fitted for being carded. By this process the fibres are placed in every possible direction in relation to each other, adhering by the serratures of the fibre, which are more numerous in the wool fitted for carding. They are thus fitted for felting, and the ends of the fibre are free to be drawn

out into the nap. While card wools are required to be fine, short in staple, and full of spiral curls and serratures,—qualities possessed by wools of which the merino and Saxony wools are types, — the combingwools, on the contrary, must be long in staple, from four to seven inches in length, comparatively coarse, having few spiral curls and serratures, and possessing a distinct lustre. These qualities are possessed in perfection by the English sheep of the Lincolnshire, Leicester, and Cotswold races; and, in a less degree, by the Cordova wools of the Argentine Republic, and the Donskoi wool of Russia. Comparatively long fine wools of the merino race, from two and a half to three inches in length, are combed for making delaines and similar fabrics; but they are not classed in the trade as combing or worsted wools.

An unprecedented demand for these wools has arisen in all manufacturing nations within the last ten years, and the prices have more than doubled in that period. This is due, first, to the vast improvements in combing by machinery made within the past fifteen years; secondly, to the late scarcity of cotton; and, thirdly, to the introduction of fabrics from alpaca wool; and the discovery that by the use of cotton warps, with a filling of combing-wool, an admirable substitute might be made for alpaca fabrics. There is an immense demand for these fabrics for female wear.

The goods manufactured from combing-wools, or worsteds, are alpaca fabrics, poplins, grenadines, and an infinite variety of fabrics for female wear, the consumption of which is constantly increasing; the contexture and patterns of the fabrics can be changed indefinitely to suit the caprices of fashion, and they constitute the great bulk of the class known as "novelties;" furniture goods, moreens, 'damasks, reps, mohairs, &c.; hosiery goods, such as zephyrs, nubas, &c.; braids, bindings, bunting, webbing for saddlery and suspenders. Carpets are made from coarse and cheap combing-wools; the white yarns being made from Canada wool. It is the opinion of manufacturers, that the finer classes of carpets could be made wholly of Canada wool with advantage.

The vast variety of fabrics, included in the worsted manufacture is illustrated by the following list of goods professed to be made by one firm in Bradford, the seat of the worsted manufacture in England:—

Amiens. Alpaca Lustres. Figured Lustres. Buntings. Camblets, -Mexican make. Dutch make. East India and China make. Cambletees. Worsted Crapes. Union Mixed Grandville " Cotton warp Cubicas. Crape Coatings. Cobourgs. Shawl Cloth. Plain Backs.

Worsted Stockinetts. Worsted Damasks. Union Merino Worsted Dobbies. French Figures. Worsted full Twills. Cotton warp Grograms or Russel Cords. Plain and Fancy Gambroons. Linings. Italian Crapes. Worsted Lastings. Moreens. Mohair Figures. Lustre Orleans. Figured Orleans. Cotton warp Orleans.

Worsted Princettas.
Alepines.
Queen's Cloth.
Worsted figured Russells.
Union " "
Silk warp " "
Worsted Serge de Berrie.
Union Serge de Berrie.
Union Serge de Berrie.
Shalloons.
Plain Shotts.
Figured striped Shotts.
Says, stout make.
Says, Merino make.

Mixed Stockinetts.
Grandville ,,
Webbings.
Summer Cloths.
Stout Orleans.
Denmark Latteens.
Wildbores.
Tammies.
Tournay Cloths.
Chipa Cloth.
Pelliones.
Ponchos and Mantas.
Yergas.

The importance of the manufacture is evinced by the fact, that the worsted manufacture employed in England, in 1856, 87,794 persons; while the cardwool manufacture employed only 79,091. In France, this industry employed, in 1851, 300,000 persons. In this country, in 1860, less than 3,000 were employed. Worsted goods constitute the largest part of our importations. Of sixty millions of woollens and worsteds, forty millions were of worsted alone.

The manufacture of worsteds, which is just begining to have an important development in this country, owes its existence to the Reciprocity Treaty, which admitted, free of duty, the wools of Canada. The farmers of Upper Canada, of English and Scotch descent, naturally prejudiced in favor of the sheep husbandry which prevails at home, — as England is still called in the colonies, — and having a taste for English mutton, imported sheep of the Leicester, Cotswold, and Down races, which have thriven admirably on the naturally rich limestone soils of Upper Canada.

The present production of wool from these sheep in Canada is about six millions of pounds. The Canadians have no fine-woolled sheep. Protected by a tariff, they consume about two millions of their own wool in the manufacture of coarse cloths, including tweeds, which have been imported largely into the United States, notwithstanding the duty on cloths; and we use the balance of from three to five millions.

I have before me an approximative estimate, made by a worsted manufacturer in June, of the amount of combing-wools required for our principal mills, which is as follows:—

Pacific Mills, Lawrence, stuff-goods, granadines	800,000	lbs.
Other mills in Lawrence	200,000	22
Hamilton Company, Lowell, stuff-goods	800,000	99
Lowell Carpet Company, stuff-goods	250,000	39
Abbot Worsted Company, yarns	200,000	"
James Dugdale, Lowell, yarns	150,000	"
Rhoades, Lowell, yarns	100,000	22
John Saydan, Lowell, yarns	75,000	99
Craven & Moore, Westford, yarns	110,000	"
American Braid Company, Pawtucket, R.I., yarns and		
braids	100,000	29
Goff & Son, Pawtucket, R.I., yarns and braids	75,000	27
Valley Worsted Company, Providence, R.I., fancy		
hosiery and braids	250,000	"
Kalmia Mills, Connecticut, worsted damasks, broca-		
telles, &c	150,000	"
John Yewdell, Philadelphia, yarns	100,000	"
Samuel Yewdell, Philadelphia, yarns	150,000	"
Thornton, Troy, N.Y., yarns	50,000	"
Aberdeen, near Patterson, N.J., yarns	50,000	"
Bigelow Carpet Company, white yarns	100,000	77
Manchester Print-Works, for stuff-goods bought last		
year	800,000	"
	2,900,000	lbs.

The amount ascertained to have been used in other mills not included in this estimate, will carry the present yearly consumption of Canada wools to at least four million pounds.

As the American production of worsted combingwool is not sufficient to supply one mill, if the treaty should not be renewed, or some provision be made for the free admission of Canada wools, the worsted manufacturer will be compelled to pay the *whole* of the present high duty on wools, of the class consumed by him, from which his foreign rival is exempt.

The wool adapted to the worsted manufacture cost now in Canada, in gold, from forty to forty-five cents. The duties, under the present tariff, are on wools over thirty-two cents, twelve cents, and ten per cent ad If the present tariff should operate on valorem. Canada wools, the duties on wools commonly used at present prices would range from forty to thirtyseven per cent. It is shown by the sworn statements of manufacturers submitted herewith, that these duties on the raw material, together with other neutralizing duties, such as the internal revenue tax, would reduce the nominal protection of from thirty-five to fifty per cent; the duty on foreign worsteds, to an actual protection ranging from zero to only four per It is vain to suppose that worsted manufacture can be continued or increased under such disadvantages.

A duty on Canada wools would crush an industry which has already assumed a truly national importance, and has advanced with a rapidity unexampled in any branch of our textile manufactures. It is shown by the statements under oath of four leading manufacturers herewith submitted (see statement of Samuel Fay and others), "that worsted yarns, of the finer grades, were made in this country only to a very limited extent prior to 1860 or 1861, except for delaines. The introduction of the manufacture of the finer worsted yarns is due to the command of Canada wools, admitted free under the Reciprocity Treaty. We estimate the capital, now employed in the manufacture of the various kinds of worsted goods, at eight million dollars; and the yearly value of the product, at not less than ten million dollars. We do not hesitate to say, that, in our opinion, the whole of this manufacture is dependent upon the supply of Canada wool; and that, if Canada wool should be subjected to duties ruling under the present tariff, the greater part of this manufacture would be suspended."

Mr. Morse, a leading manufacturer of braids, says, in his sworn statement, herewith submitted: "The first manufacture of worsted braid in this country was commenced, in 1860, with sixteen English machines. We estimate that three thousand machines for braiding worsted are now in operation in this country, that the operation of these machines requires a capital of one million dollars, and that the annual value of the product is three millions. With the present supply of yarns, and the present machinery, it is impossible to supply the demand. We have orders to-day for a hundred thousand dozen of braids ahead of our production. The existence of this manufacture

is wholly dependent upon the supply of Canada wool."

If the manufacture of a single article of the hundreds which may be made from these combing-wools is so important, there can be no doubt of the correctness of the estimate made by one of the most experienced observers of the American wool market, Mr. Bond, who stated, at the Syracuse Convention, that "we should readily and promptly consume in this country not less than twenty million pounds of such wools, if we had the supply."

The adoption of a policy which would overthrow this most promising of all our textile manufactures, can be warranted only by unquestionable countervailing advantages to American producers,—the woolgrowers, for example.

Excluded as the wool-growers of the West especially have been from communication with Eastern manufacturers, and uninformed, like most others in the community, of the peculiar uses to which these wools are applied, it is quite natural that their first impression should be unfavorable to the free admission of Canada wools. It is believed, however, that a candid consideration of the facts will convince even our Western farmers, that no possible advantage to the wool-growers of the United States can accrue from a duty on Canadian wools. They do not, in fact, compete with the wools now produced in this country. It is safe to say, that not 300,000 pounds of combingwools are produced in the United States; and we export to Canada for her mills a much larger quan-

tity of our fine wool. That this estimate is large is shown by statistics of Ohio, the largest sheep-growing State in the Union, and furnishing about one-sixth of our whole production. The whole number of sheep in Ohio, in 1862, as shown by the agricultural reports, was 4,448,227. The number of Cotswold and Leicester sheep, producing combing-wool, is set down for 1863 at only 3,324, which, at seven pounds per fleece, produced 23,268 pounds of wool. This multiplied by six, the proportion of sheep in the rest of the United States to Ohio, would make the whole product of combing-wool 139,592 pounds.

It is believed that combing-wools can be grown with great advantage in this country, particularly since the enormous relative increase in price of these wools; and it is believed that much incidental benefit will accrue to the country from the improvement in mutton and lambs which will be effected by the culture of long-woolled sheep. But the inducement for growing this wool must come principally from the demand of our manufacturers. Check the worsted manufacture, and there will be no hope of introducing this species of sheep-husbandry, which is one of the most important sources of the agricultural wealth of England.

The American producer of fine wool may need protection against the fine wool of Australia and La Plata, produced by cheaper labor. But the cost of production of combing-wools in Canada, and similar districts in the United States, would be nearly equal, the cost of labor being nearly the same. The American who

goes into the production of combing-wools near the great cities, the only situation where this wool will be likely to be raised, will have the advantage in having his wool, mutton, and lambs nearer the market. American production of combing-wool will probably never be repressed by Canadian competition; while the Canadian supply will keep the mills running, which will make a demand for wool for both the Canadian and American. Canadian sheep husbandry will not compete with American fine-wool husbandry; for the latter differs from the former as much as it does from pork-raising. Fine-wool husbandry is adapted to the prairies of the West, and the hill-sides of the Alleghanies, where the sheep are raised for wool principally, in flocks of a thousand or more; and the sheep are not killed till they are old. The long-wool husbandry is adapted to stall-feeding or high farming in the neighborhood of the great markets, where there is a sale for fat mutton and early lambs, the wool being only the accessory. The sheep are kept in small flocks, and are killed as soon as they reach maturity.

The encouragement of the worsted manufacture by means of free Canada wool, would, in fact, benefit the American wool-growing interest by increasing the demand, and consequently the price, of the kind of wool at present most in favor with the American producer: I mean the heavy Vermont merino fleece. This wool, on account of its strength and superior length, is admirably fitted for soft stuff-goods for female wear, the manufacture of which is carried on in England

and France, in the same establishments which work the combing-wools; for the products, being fitted for the same consumption, can be put on the market together. The mills in this country which have lately introduced the manufacture of Alpaca fabrics from Canada combing-wools, have at the same time introduced the manufacture of Coburgs, a kind of soft stuffgoods from the American merino fleece. I can point to the establishments of the Lowell Manufacturing Company and the Pacific Mills, where both classes of fabrics are made. To introduce the manufacture of stuff-goods into this country, now our greatest necessity, the supply of both kinds of wool is necessary, and the demand for the long combing-wools will certainly create an equally increased demand for the peculiar wool of the American merino. It is working exactly so in England at the present time. The price of English combing-wool is now unprecedented, while that of cloth wools remains stationary. At the last quarterly sales in December, Australian merino combing-wools, analogous to Vermont merino wools, advanced fourpence a pound.

If these views are correct, there remains but one argument for imposing a duty on Canadian wools,—the necessities of the revenue. But it is evident, that the American manufacturer cannot import and pay the onerous duty which will be operative under the present tariff; and it is equally evident, that the loss to the internal revenue by diminishing the manufacture will be greater than any gain from a duty on wool.

The imposition of duty on Canadian wool would therefore be a suicidal act, justified by no possible advantage; and would be a concession, not to our farmers, who would suffer by the act, but to mere popular prejudice. It would be an act of bad faith to the manufacturers who have erected expensive establishments, and imported costly machinery, upon which they paid a duty of over forty-five per cent in gold, upon the faith that treaty stipulations would have a permanence not expected in legislative provisions.

It is true that Canada derives great benefit from selling her wools in this country at fifty cents a pound; but how much greater benefit do we derive from employing them to nationalize a great manufacture in this country! It was a benefit to the English wool-growers, for two or more centuries, to send all their combing-wool to Flanders; but Flanders, by the command of the wool of England for her manufactures, became the richest commercial nation in Europe. In the supply of wool, Canada is to us what England was to Flanders before the time of Edward III., who kept his wool at home; and what Ireland is to England now, and what England desires all the world to be to her besides. We wish to apply to Canada the lesson which England has taught us; and it is not our fault that Canada is also pressing for the freedom to export her raw material, and is blind to the obvious fact that such a policy will always keep her impoverished and dependent.

These views are presented with the conviction that

the American producer of wool will derive no possible advantage from a tax on Canadian wools; and they are presented with the distinct admission, that, if the American wool-grower can furnish reasonable evidence that a duty on Canadian wools will aid his production, he has a right to demand it, and we are bound to concede it.

The American consumers of Canada wool do not desire to complicate the matter in which they are specially interested, with the question of the termination or renewal of the Reciprocity Treaty. But, in case of its termination, they feel justified by the foregoing facts in asking, that Canada wools, by a special legislative provision, may be admitted free of duty. a provision for admitting combing-wools only, would be objectionable on account of the practical difficulty at the custom-house in determining what are combing-wools; for portions of some fleeces may be selected for combing, while other portions may be used for carding. But so little carding-wool will be received, the Canadians not producing enough card wool to supply their own mills, that it would be better to submit all Canadian wools to the same provision.

The above proposition is made upon the consideration, that the simplest mode of preserving the worsted manufacture is to continue the system under which it has grown up. But the popular prejudice against any form of free trade with the British Provinces, and the consideration that the advocacy of the above plan may be an apparent abandonment of the principle of

protection, suggest another mode of affording relief to the worsted manufacturers. The alternative plan is therefore suggested, if a duty shall be imposed upon Canadian wools, of placing an additional duty upon manufactures of worsted, sufficient to be countervailing against the duty on the wool. This plan would be in harmony with the principles upon which the present tariff laws are based. It is believed that such an additional duty would not materially check importations, and would add largely to the revenue.

I have the honor to be, very respectfully, your obedient servant,

JOHN L. HAYES, Secretary.

APPENDIX.

To the United-States Revenue Commission.

THE undersigned representatives of ______ companies engaged in the manufacture of worsteds, viz., Samuel Fay, Superintendent of the Lowell Manufacturing Company; Allan Cameron, Agent of the Abbott Worsted Company; O. H. Moulton, Agent of the Hamilton Manufacturing Company,— respectfully submit the following statement in regard to the manufacture of worsteds:—

Worsted yarns of the finer grades were made in this country only to a very limited extent, prior to 1860 or 1861, except for delaines; the yarns manufactured, prior to that, being principally designed for carpets. The introduction of the manufacture of the finer worsted yarns is due to the command of Canada wools admitted free under the reciprocity treaty. Yarns for the west of worsted stuff goods are made of long lustre combing wools, such as are grown upon sheep known as Leicestershire, Cotswold, and similar breeds, raised in England and Canada.

Other worsted fabrics are made with warps manufactured from wool described above, and weft made from the longest merino wool. Machinery, specially adapted for manufacturing worsteds from long combing wools, has been imported from England, and is adapted for no other purpose; so that, if the raw material is wanting, the machinery must be idle. The Canada wools, used for making worsted in this country, are fully equal to the English combing wools; and the fabrics made in this country are equal,

The amount ascertained to have been used in other mills not included in this estimate, will carry the present yearly consumption of Canada wools to at least four million pounds.

As the American production of worsted combingwool is not sufficient to supply one mill, if the treaty should not be renewed, or some provision be made for the free admission of Canada wools, the worsted manufacturer will be compelled to pay the *whole* of the present high duty on wools, of the class consumed by him, from which his foreign rival is exempt.

The wool adapted to the worsted manufacture cost now in Canada, in gold, from forty to forty-five cents. The duties, under the present tariff, are on wools over thirty-two cents, twelve cents, and ten per cent ad valorem. If the present tariff should operate on Canada wools, the duties on wools commonly used at present prices would range from forty to thirtyseven per cent. It is shown by the sworn statements of manufacturers submitted herewith, that these duties on the raw material, together with other neutralizing duties, such as the internal revenue tax, would reduce the nominal protection of from thirty-five to fifty per cent; the duty on foreign worsteds, to an actual protection ranging from zero to only four per It is vain to suppose that worsted manufacture can be continued or increased under such disadvantages.

A duty on Canada wools would crush an industry which has already assumed a truly national importance, and has advanced with a rapidity unexampled in any branch of our textile manufactures. It is shown by the statements under oath of four leading manufacturers herewith submitted (see statement of Samuel Fay and others), "that worsted yarns, of the finer grades, were made in this country only to a very limited extent prior to 1860 or 1861, except for delaines. The introduction of the manufacture of the finer worsted yarns is due to the command of Canada wools, admitted free under the Reciprocity Treaty. We estimate the capital, now employed in the manufacture of the various kinds of worsted goods, at eight million dollars; and the yearly value of the product, at not less than ten million dollars. We do not hesitate to say, that, in our opinion, the whole of this manufacture is dependent upon the supply of Canada wool; and that, if Canada wool should be subjected to duties ruling under the present tariff, the greater part of this manufacture would be suspended."

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The adoption of a policy which would overthrow this most promising of all our textile manufactures, can be warranted only by unquestionable countervailing advantages to American producers,—the woolgrowers, for example.

Excluded as the wool-growers of the West especially have been from communication with Eastern manufacturers, and uninformed, like most others in the community, of the peculiar uses to which these wools are applied, it is quite natural that their first impression should be unfavorable to the free admission of Canada wools. It is believed, however, that a candid consideration of the facts will convince even our Western farmers, that no possible advantage to the wool-growers of the United States can accrue from a duty on Canadian wools. They do not, in fact, compete with the wools now produced in this country. It is safe to say, that not 300,000 pounds of combingwools are produced in the United States; and we export to Canada for her mills a much larger quan-

tity of our fine wool. That this estimate is large is shown by statistics of Ohio, the largest sheep-growing State in the Union, and furnishing about one-sixth of our whole production. The whole number of sheep in Ohio, in 1862, as shown by the agricultural reports, was 4,448,227. The number of Cotswold and Leicester sheep, producing combing-wool, is set down for 1863 at only 3,324, which, at seven pounds per fleece, produced 23,268 pounds of wool. This multiplied by six, the proportion of sheep in the rest of the United States to Ohio, would make the whole product of combing-wool 139,592 pounds.

It is believed that combing-wools can be grown with great advantage in this country, particularly since the enormous relative increase in price of these wools; and it is believed that much incidental benefit will accrue to the country from the improvement in mutton and lambs which will be effected by the culture of long-woolled sheep. But the inducement for growing this wool must come principally from the demand of our manufacturers. Check the worsted manufacture, and there will be no hope of introducing this species of sheep-husbandry, which is one of the most important sources of the agricultural wealth of England.

The American producer of fine wool may need protection against the fine wool of Australia and La Plata, produced by cheaper labor. But the cost of production of combing-wools in Canada, and similar districts in the United States, would be nearly equal, the cost of labor being nearly the same. The American who

goes into the production of combing-wools near the great cities, the only situation where this wool will be likely to be raised, will have the advantage in having his wool, mutton, and lambs nearer the market. American production of combing-wool will probably never be repressed by Canadian competition; while the Canadian supply will keep the mills running, which will make a demand for wool for both the Canadian and American. Canadian sheep husbandry will not compete with American fine-wool husbandry; for the latter differs from the former as much as it does from pork-raising. Fine-wool husbandry is adapted to the prairies of the West, and the hill-sides of the Alleghanies, where the sheep are raised for wool principally, in flocks of a thousand or more; and the sheep The long-wool husare not killed till they are old. bandry is adapted to stall-feeding or high farming in the neighborhood of the great markets, where there is a sale for fat mutton and early lambs, the wool being only the accessory. The sheep are kept in small flocks, and are killed as soon as they reach maturity.

The encouragement of the worsted manufacture by means of free Canada wool, would, in fact, benefit the American wool-growing interest by increasing the demand, and consequently the price, of the kind of wool at present most in favor with the American producer: I mean the heavy Vermont merino fleece. This wool, on account of its strength and superior length, is admirably fitted for soft stuff-goods for female wear, the manufacture of which is carried on in England

and France, in the same establishments which work the combing-wools; for the products, being fitted for the same consumption, can be put on the market together. The mills in this country which have lately introduced the manufacture of Alpaca fabrics from Canada combing-wools, have at the same time introduced the manufacture of Coburgs, a kind of soft stuffgoods from the American merino fleece. I can point to the establishments of the Lowell Manufacturing Company and the Pacific Mills, where both classes of fabrics are made. To introduce the manufacture of stuff-goods into this country, now our greatest necessity, the supply of both kinds of wool is necessary, and the demand for the long combing-wools will certainly create an equally increased demand for the peculiar wool of the American merino. It is working exactly so in England at the present time. The price of English combing-wool is now unprecedented, while that of cloth wools remains stationary. At the last quarterly sales in December, Australian merino combing-wools, analogous to Vermont merino wools, advanced fourpence a pound.

If these views are correct, there remains but one argument for imposing a duty on Canadian wools,—the necessities of the revenue. But it is evident, that the American manufacturer cannot import and pay the onerous duty which will be operative under the present tariff; and it is equally evident, that the loss to the internal revenue by diminishing the manufacture will be greater than any gain from a duty on wool.

The imposition of duty on Canadian wool would therefore be a suicidal act, justified by no possible advantage; and would be a concession, not to our farmers, who would suffer by the act, but to mere popular prejudice. It would be an act of bad faith to the manufacturers who have erected expensive establishments, and imported costly machinery, upon which they paid a duty of over forty-five per cent in gold, upon the faith that treaty stipulations would have a permanence not expected in legislative provisions.

It is true that Canada derives great benefit from selling her wools in this country at fifty cents a pound; but how much greater benefit do we derive from employing them to nationalize a great manufacture in this country! It was a benefit to the English wool-growers, for two or more centuries, to send all their combing-wool to Flanders; but Flanders, by the command of the wool of England for her manufactures, became the richest commercial nation in Europe. In the supply of wool, Canada is to us what England was to Flanders before the time of Edward III., who kept his wool at home; and what Ireland is to England now, and what England desires all the world to be to her besides. We wish to apply to Canada the lesson which England has taught us; and it is not our fault that Canada is also pressing for the freedom to export her raw material, and is blind to the obvious fact that such a policy will always keep her impoverished and dependent.

These views are presented with the conviction that

the American producer of wool will derive no possible advantage from a tax on Canadian wools; and they are presented with the distinct admission, that, if the American wool-grower can furnish reasonable evidence that a duty on Canadian wools will aid his production, he has a right to demand it, and we are bound to concede it.

The American consumers of Canada wool do not desire to complicate the matter in which they are specially interested, with the question of the termination or renewal of the Reciprocity Treaty. But, in case of its termination, they feel justified by the foregoing facts in asking, that Canada wools, by a special legislative provision, may be admitted free of duty. Such a provision for admitting combing-wools only, would be objectionable on account of the practical difficulty at the custom-house in determining what are combing-wools; for portions of some fleeces may be selected for combing, while other portions may be used for carding. But so little carding-wool will be received, the Canadians not producing enough card wool to supply their own mills, that it would be better to submit all Canadian wools to the same provision.

The above proposition is made upon the consideration, that the simplest mode of preserving the worsted manufacture is to continue the system under which it has grown up. But the popular prejudice against any form of free trade with the British Provinces, and the consideration that the advocacy of the above plan may be an apparent abandonment of the principle of

protection, suggest another mode of affording relief to the worsted manufacturers. The alternative plan is therefore suggested, if a duty shall be imposed upon Canadian wools, of placing an additional duty upon manufactures of worsted, sufficient to be countervailing against the duty on the wool. This plan would be in harmony with the principles upon which the present tariff laws are based. It is believed that such an additional duty would not materially check importations, and would add largely to the revenue.

I have the honor to be, very respectfully, your obedient servant,

JOHN L. HAYES, Secretary.

APPENDIX.

To the United-States Revenue Commission.

THE undersigned representatives of ______ companies engaged in the manufacture of worsteds, viz., Samuel Fay, Superintendent of the Lowell Manufacturing Company; Allan Cameron, Agent of the Abbott Worsted Company; O. H. Moulton, Agent of the Hamilton Manufacturing Company,— respectfully submit the following statement in regard to the manufacture of worsteds:—

Worsted yarns of the finer grades were made in this country only to a very limited extent, prior to 1860 or 1861, except for delaines; the yarns manufactured, prior to that, being principally designed for carpets. The introduction of the manufacture of the finer worsted yarns is due to the command of Canada wools admitted free under the reciprocity treaty. Yarns for the west of worsted stuff goods are made of long lustre combing wools, such as are grown upon sheep known as Leicestershire, Cotswold, and similar breeds, raised in England and Canada.

Other worsted fabrics are made with warps manufactured from wool described above, and weft made from the longest merino wool. Machinery, specially adapted for manufacturing worsteds from long combing wools, has been imported from England, and is adapted for no other purpose; so that, if the raw material is wanting, the machinery must be idle. The Canada wools, used for making worsted in this country, are fully equal to the English combing wools; and the fabrics made in this country are equal, in all respects, to imported fabrics. There is a demand for all that can be manufactured from the present machinery.

We estimate the capital now employed in the manufacture of yarns and the various kinds of worsted goods at \$8,000,000, and the yearly value of the product of worsted goods at not less than \$10,000,000,—this exclusive of manufacture of delaines, in which American merino wools are used with the shorter Canada wools.

We do not hesitate to say, that, in our opinion, the whole of this manufacture is dependent upon the supply of Canada wool; and that, if Canada wool should be subjected to duties ruling under the present tariff, the greater part of this manufacture will be suspended.

SAMUEL FAY, Sup't Lowell Manf'g Co.
O. H. MOULTON, Sup't Hamilton Manf'g Co.
JOHN C. MORSE & Co.
ALLAN CAMERON.

STATE OF MASSACHUSETTS, COUNTY of SUFFOLE,

Sworn to and subscribed before me, the 13th day of January, 1866.

Francis S. Dyer, Notary Public.

To the United-States Revenue Commission.

THE undersigned, John C. Morse & Co., of Massachusetts, respectfully represent, that we are engaged in the manufacture of worsted braids, at Attleborough, Mass. We have employed at our establishment an average of five hundred machines all the time. With that quantity of machinery running, we can manufacture braids of the value of \$800,000 per annum, which value we are, in fact, now manufacturing; and we expect to manufacture a

value of \$1,000,000 per annum. These braids are made of worsted yarns spun from Canada wool. The machines for braiding which we use are of American invention, made expressly for manufacturing worsted braids in this country, and are great improvements upon English machines; being simpler, and costing about half the price, and taking but half the power to work them.

The first manufacture of worsted braid in this country was commenced in 1860, with sixteen English machines. We estimate that three thousand machines for braiding worsted are now in operation in this country, that the operation of these machines requires a capital of one million dollars, and that the annual value of the product is three millions. With the present supply of yarns and the present machinery, it is impossible to supply the demand. We have orders to-day for 100,000 dozen of braids ahead of our production.

The existence of this manufacture is wholly dependent upon the supply of Canada wool. The American yarns made of Canada wools are superior for the manufacture of braids to the English yarns.

JOHN C. MORSE & Co.

STATE OF MASSACHUSETTS, COUNTY OF SUFFOLK,

Sworn to and subscribed before me, this 18th day of January, A.D. 1866.

Francis S. Dyer, Notary Public.





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Report of the Proceedings

OF THE

CONVENTION OF DELEGATES

ERGOR TECH

NATIONAL ASSOCIATION OF WOOL MANUFACTURERS,

AND PROB THE SEVERAL ORGANIZATIONS.

OF THE

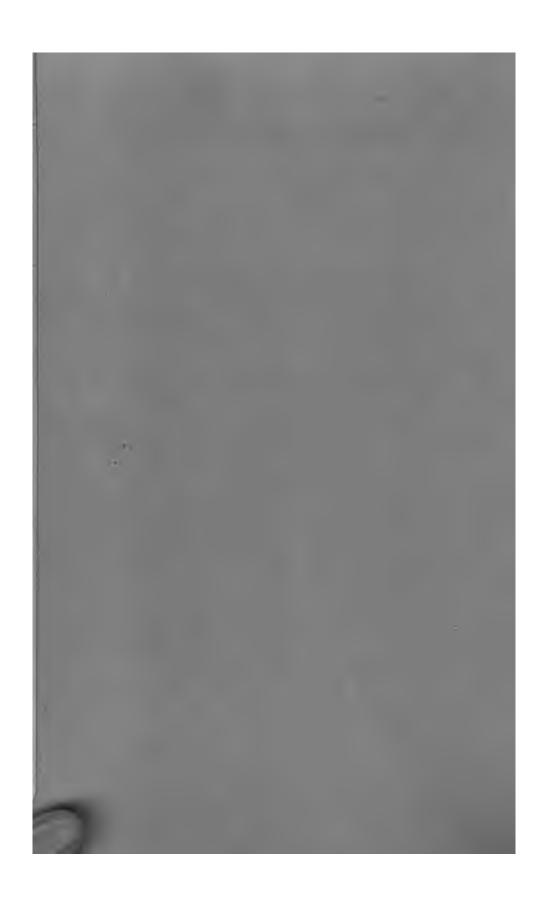
WOOL GROWERS OF THE UNITED STATES,

AT

SYRACUSE, NEW YORK,

DEC. 13, 1865.

BOSTON: PRESS OF JOHN WILSON AND SONS. 1866.



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. . • THE following Report of the Proceedings of the Convention of the Wool Growers and Wool Manufacturers of the United States, prepared, under the supervision of the undersigned, from phonographic notes made with great fidelity by Mr. Yerrinton, of Boston, is commended to the attention of all interested in the two branches of industry represented. They will find the addresses and discussions replete with practical and original facts and suggestions; and, in the harmony of once distrustful, if not hostile interests, pledged by the resolutions and breathing through all the deliberations of the Convention, will receive the most hopeful assurance of the future stability and prosperity of the woollen interest of the United States.

JOHN L. HAYES, Secretaries of 8. D. HARRIS, the Convention.

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REPORT.

In accordance with the terms of a call issued by the Executive Committee of the National Association of Wool Manufacturers, a Convention of wool-growers and wool manufacturers was held in the city of Syracuse, New York, on Wednesday, December 13, at which the two interests were represented by delegates, as follows:—

National Association of Wool Manufacturers.

E. B. BIGELOW, Mass., President.
J. L. HAYES, Mass., Secretary.
JOAHUA STETSON, Massachusetts.
THEODORE POMEROY, Massachusetts.
A. C. RUSSELL, Massachusetts.
S. BLACKINTON, Massachusetts.
JESSE EJ DY, Massachusetts.
JESSE EJ DY, Massachusetts.
JOHN V. BARKER, Massachusetts.
JOHN V. BARKER, Massachusetts.
T. S. FAXTON, New York.

C. H. Adams, New York.
R. MIDDLETON, New York.
CHARLES STOTT, New York.
H. D. TELKAMPF, New York.
R. G. HAZARD, Rhode Island.
N. KINGSBURY, Connecticut.
HOMER BLANCHARD, Connecticut.
GEORGE KELLOGG, Connecticut.
DAVID OAKES, New Jersey.
ALTON POPE, Ohio.

Wool-Growers' Associations.

NEW YORK.

HENRY S. RANDALL, President.
GEORGE GEDDES.
E. B. POTTLE.
WILLIAM KELLY.
JAMES O. SHELDON.
WILLIAM CHAMBERLAIN.
SAMUEL THORNE.
D. D. T. MOORE.
JAMES M. ELLIS.

A. F. WILCOX.
E. E. BROWN.
LIONEL SHERWOOD.
HENRY P. RANDALL.
WM. M. HOLMES.
DAVIS COSSIT.
JAMES GEDDES.
CHARLES TALLMAN.
ALLEN H. AVERY.
JOHN R. PAGE.

H. D. L. SWEET.
ADDISON H. CLAPP.
LUTHER BAKER.
SPENCER BEARD.
CHARLES H. HIBBARD.
WILLIAM PLUMB.

VERMONT.

J. W. Colburn, President.
EDWIN HAMMOND.
JOHN H. THOMAS.
HENRY BOYNTON.
HAMPDEN CUITS.
WILLIAM R. SANFORD.
JOHN GREGORY.
GEORGE CAMPBELL.

OHIO.

R. M. MONTGOMERY, *President*. S. D. HARRIS. WM. F. GREER.

ILLINOIS.

A. M. GARLAND, President.
JOHN McCONNELL.
FRANKLIN FASSETT.
SAMUEL P. BOARDMAN.

WISCONSIN.

ELI STILLSON, President.
THOS. GOODHUR.

NEW-ENGLAND ASSOCIATION.

GEORGE B. LORING, President.
VICTOR WRIGHT.
DANIEL KIMBALL.
THOMAS SANDERS.
E. S. STOWELL.
HENRY CLARE.
JEREMIAH THORNTOM.

The delegates assembled at the City Hall in Syracuse, on the morning of the above-named day, and were called to order, shortly after 10 o'clock, by Erastus B. Bigelow, Esq., President of the National Association of Wool Manufacturers, who read the call, as follows:—

NATIONAL ASSOCIATION OF WOOL-GROWERS,
Office, 55, Summer Street,
BOSTON, MASS., November 22, 1865.

SIR, — I am directed by the government of the "National Association of Wool Manufacturers" to communicate to you the following copy of a resolve passed at their last meeting, and to respectfully Pavite your attendance at the meeting therein indicated:—

"Resolved, That the Executive Committee of the National Association of Wool Manufacturers be instructed to invite the several organizations of wool-growers to meet at _____, on _____ of _____, for the purpose of consultation in relation to their mutual interests, especially as to the representations to be given respecting the wool-producing and wool-manufacturing interests before the United States [Tariff and Revenue Commission."

After consultation with representatives of the wool-growing interests present, the place and time of such meeting was fixed at Syracuse, N.Y., on the second Wednesday of December, 1865.

Permit me to express the earnest desire of the government of the National Association of Wool Manufacturers, that the wool-producing interests of the United States may be fully represented at the proposed conference, at which a full representation of wool manufacturers will be present. It is hoped, that, by a comparison of views at this meeting, the real identity of interests between the wool-growers and wool-manufacturers may be fully recognized and firmly established, and that they may hereafter go hand in hand in promoting one of the most important sources of the agricultural and manufacturing prosperity of the nation.

I have the honor to be, sir, very respectfully, your obedient servant,

(Signed,)

JOHN L. HAYES, Secretary.

Addressed to Hon. HENRY S. RANDALL, President of the Association of Wool-Growers of the State of New York, and others.

Mr. Bigelow then said: "To carry out the objects of this meeting, it is necessary that it should be organized by the choice of the proper officers. With your permission, I will nominate, as the President of the Convention, the Honorable Henry S. Randall of New York."

This nomination was unanimously confirmed by the Convention; and, on motion of General S. D. Harris, of Ohio, JOHN L. HAYES, Esq., of Massachusetts, was appointed Secretary.

On motion of H. Blanchard, Esq., of Connecticut, General Harris was elected an additional Secretary.

The President then addressed the Convention as follows:—

Gentlemen of the Convention, — I thank you for the honor you have done me in calling me to preside over your deliberations. This convention, or conference, will, I trust, mark the introduction of a new era in some of the important relations subsisting between two great industrial interests. The American wool-producers and manufacturers have entertained differences of opinion on the subject of the respective duties which should be imposed on imported raw and manufactured wool. Those differences have led to repeated and severe contests in Congress, in nominating conventions, and even at the polls. The whole history of our tariff legislation on this subject has been a history of sudden, and, occasionally, violent changes in measures, and even in policy. Having elsewhere attempted to trace the effects of

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our different woollen tariffs on the two interests most directly involved, I will not repeat myself here. But I will call your attention to one great and significant fact which has been clearly established amidst all these struggles and changes. It is that when the government has protected the manufacturer at the expense of the producer, or the producer at the expense of the manufacturer, the injurious consequences have fallen not alone on the branch of industry discriminated against, but upon both. This was inevitable; for, in reality, their interests are indissolubly connected. Neither could possibly flourish without the other, under any circumstances which have occurred in our country, or which can reasonably be expected to occur for generations to come.

The producer must have a remunerative home market. It is in vain to suppose, that American farmers generally, on their comparatively small farms, and with their comparatively small capital, with the high duties of freemen and electors to discharge, with government to support, with public trusts to fill, with schoolhouses and churches to maintain, with children to educate for the future statesmen of our country, with those comfortable and respectable homes and easy modes of life to keep up, which should be made attainable to all the industrious citizens of a free republic, — it is in vain, I say, to suppose that such men can compete with the vastly cheaper labor and aggregated capital of various other countries in the production of any article, the price of which is so large in proportion to the cost of transportation as wool. On the other hand, the American manufacturer, without the home production of the raw material, would find it in the end more expensive, and at all times more difficult, if not actually impracticable, to obtain his full supply. And the same principle of free-trade which overthrew the producer, would, as a matter of course, extend to him; for it is not, and never can be, the policy of the American government so to legislate as to protect the manufacture of foreign staples to the exclusion of our own.

A United States Revenue Commission is now acting under the authority of Congress, in collecting facts in respect to the operation of those laws under which all our government revenues are collected. This looks toward a change in those laws, and among others in our tariff on wools and woollens, if such a change is found to be needed. The United States Revenue Commission to obtain the requisite information in regard to manufacturing, addressed inquiries to the National Association of Wool Manufacturers as the organ of that

interest. To obtain the statistics of wool production, it purposed addressing inquiries to the several State Wool-Growers' Associations, until it ascertained that this national convention of both interests was to be held. It then preferred to communicate with those State Associations collectively, through their representatives here assembled.

I have the direct authority of the United States Revenue Commission for saying, that it heard with pleasure that this Convention was to assemble; and it expressed the hope that the wool producers might have "a full representation both from the East and from the West." It would, no doubt, be highly gratified if the representatives of the two interests here assembled would concur in those representations which affect their common concerns, — such, for example, as the proportionable rate of duties which should be levied on unmanufactured and manufactured wools. If such a concurrence can be obtained, and on a basis which is a just and fair one to the consumer, it is reasonable to suppose that our action will have a strong influence both on the recommendations of the Revenue Commission and on the action of Congress.

It will not do for us, gentlemen, to overlook the interests of the consumer in our deliberations. As long as duties on foreign imports shall be collected for revenue purposes, all will concede that they should be so adjusted as to give incidental protection to those important branches of American industry which cannot flourish without such aid. All civilized nations - not even excepting England under her so-called free-trade laws -- acknowledge, and, to a greater or less extent, according to their several circumstances, practise upon this principle of political economy. But the amount of such protection should always be measured by the ultimate good of the whole, and not by that of the protected classes. No patriotic and intelligent people will complain of reasonable discriminations in those duties which they choose to raise for revenue purposes, which foster home industry, and thus render them independent of foreign nations. But they have a right to complain of the establishment of any system which bestows a monopoly, or any thing savoring of a monopoly, on a class or classes. And where such systems are imposed on a free people by their legislators, they are never slow to discover the fact, and to repeal such legislation.

Gentlemen, I have endeavored to state the preliminary object of this convention, though I take it for granted the occasion will not be lost to consider and take action on some other questions. I trust that our deliberations on all subjects will be characterized by a spirit of harmony, and by an earnest disposition to agree, though it should cost some concessions from both the interests here represented. By approaching every topic in this spirit, and with a willingness to listen to and weigh facts and arguments dispassionately and fairly before adopting conclusions, all differences may be happily adjusted, and at least they will be diminished and kept free from asperity.

We do not assemble as a convention under ordinary circumstances, where it would be proper to decide questions of importance by a majority of all the delegates present. The fact that we meet as the representatives of different interests, and without any limitation as to the number of delegates on either side, precludes that course. It has been agreed, therefore, that in cases where a divided vote is called for by delegates, the representatives of the producers and manufacturers shall vote separately, and it shall require a majority of each to make any action the action of the convention. In other respects, and until otherwise ordered, the ordinary parliamentary rules applicable to conventions will prevail.

At the request of the President, E. B. Bigelow, Esq., the President of the National Association of Wool Manufacturers took a place upon the platform, and addressed the convention as follows:—

This is the first time the wool producers and the wool manufacturers of the United States have ever assembled to consult in regard to matters affecting their common interests. Considering the interrelations of these two industries, it is not a little remarkable that such a movement should have been so long delayed.

The particular cause of our coming together at this time is an application of the United States Revenue Commission for such information as will enable them, in revising the revenue laws, to suitably adapt the customs duties and internal taxes to the woollen interest.

The war having ended, it seems not improbable that these questions will soon come again before the national legislature: indeed, we may infer this probability from the existence of the commission just mentioned.

Clearly it is a matter of vast importance, that whatever is done in this direction should be not only judicious in its character, but permanent in its action. If by well-considered co-operation, we should be enabled to promote in any degree an object so desirable, the result must contribute to the best interests of the country.

As more than seventy per centum of the wool required for our vast and varied manufactures is of home growth, the interdependence of domestic wool-growing and wool manufacturing becomes apparent. Neither one of these industries can long prosper, unless the other prospers also. Taken together, they constitute an interest scarcely second in importance to any of the great industries which promote the welfare of the people, and sustain the prosperity of the nation.

This great interest owes its present growth to national legislation, and is largely dependent on the same agency for its future success. Without the equalizing aid of discriminating customs duties, we can hold no successful competition with the accumulated capital and low wages of older countries. If the woollen interest of the United States is to continue to prosper, it must be maintained in a position to contend even-handed with the woollen interest of Germany, of France, and of Great Britain.

The only contest which can give success to our efforts, lies, not between ourselves as wool-growers and wool manufacturers, but between us and the wool-growers and wool manufacturers of other nations. This is a struggle that challenges our united forces, as between ourselves there is no real ground of antagonism. On the contrary, we are one in interest, and should be allied in purpose.

Scattered over the length and breadth of the land, as the woolgrowers and wool manufacturers are, and without any organized modes of intercourse, it is not surprising that misapprehension should have arisen in regard to their actual relations, and the means necessary for their common prosperity.

The want of some organization capable of united and systematic action, has long been felt among the wool manufacturers. To supply this deficiency, they recently formed a National Association, a leading object of which is the collection and diffusion of information on all those subjects in which they, as manufacturers, are particularly interested. Though this movement has thus far succeeded beyond their highest anticipations, they are not unmindful of the fact that all efforts to advance the interests of the wool manufacturers, which do not also embrace the interests of the wool producers, will lack an essential element of success.

Influenced by these considerations, and aided by your own counsel

and co-operation, Mr. President, the government of our Association, at a recent meeting in New-York city, instructed its executive committee to invite the several State organizations of wool-growers to meet them for consultation, in relation to interests which belong to them in common, and especially to consider what answer shall be made to the inquiries of the United States Revenue Commission, as regards the great wool-producing and wool-manufacturing industries.

While these, Mr. President and gentlemen, are the immediate objects of our meeting, and demand our first attention, there are other matters of common concern which will doubtless come before us, and in regard to which it is highly important that we should think and act harmoniously. Let us hope that this occasion is to form the auspicious commencement of an intercourse between the growers and the manufacturers of wool, which shall not only be agreeable and advantageous to themselves, but beneficial to all.

To this very desirable result, the formation of a national association among the wool-growers would greatly conduce, and I venture to express the hope that measures to that effect may soon be taken.

The "objects and plan" of our Association are fully set forth in a pamphlet printed by order of its government soon after its organization. That our aims and motives may not be misunderstood, I beg to reproduce from the pamphlet just alluded to, the following paragraphs:—

"At the very outset, and with perfect sincerity, we disclaim the intention of assuming an attitude in any respect antagonistic to these great interests. It is, indeed, one leading object of our combination, that through it we may be enabled to work more understandingly, more harmoniously, more successfully with others, and especially with those whose pursuits are more or less connected with our own. We believe that there can be no greater mistake than to suppose, that any of the great industries of the country are opposed to each other, either in interest or policy. We trust that it will be an early, a constant, and a cherished object of the Association to promote harmony and co-operation among the different classes of American producers."...

"The opposition of interests, which has sometimes been thought to exist between men whose pursuits are different and yet allied,—as between those, for instance, who grow a raw material, and those who manipulate it,—is, I believe, always imaginary, and cannot fail to disappear under a careful consideration of principles and facts."...

"As our success in carrying out what is legitimate and practicable must depend somewhat on right understanding of what we can and what we cannot do, I may be permitted here to suggest, that this Association is not a combination among the manufacturers of a par ticular class, to fix the prices of their fabrics, or to control the mar kets. Probably there are very few among us who have thought sc little on the great laws of trade, or who know so little of human nature, as not to see that any such attempt would bring confusion into business, and, in addition to the odium which it would devolve on its authors, would be ultimately injurious to their interests. Let us not forget, however, that there is a way in which the operations of our society may have a natural and a wholesome influence on the course of trade. Just so far as it shall aid in ascertaining the exact condition of the demand and the supply, and in keeping the producer constantly acquainted with the actual relations of those two important quantities, will it contribute to the normal and healthy adjustment of the same."

These are the sentiments, Mr. President, which have animated our Association from its commencement.

The response to our invitation, which is made, gentlemen, by your presence here to-day, is of the most gratifying character. It gives assurance, that, whatever may have been heretofore the attitude of those respectively engaged in the two industries here represented, they will henceforth move hand in hand in regard to all questions of practical interest and of national policy which affect their common prosperity.

Hon. R. G. HAZARD, of R. I., moved the appointment of a Business Committee, to propose topics of discussion for the Convention.

W. F. Greer, of Ohio. — Before that Committee is appointed, I think it would be highly proper, as there are several of the presiding officers of the State Associations here, that we should afford them an opportunity to express their views upon this question. For the purpose of carrying out this wish, I move that Dr. Geo. B. Loring, of Mass., the president of the New England Association of Wool-Growers, be invited to address the meeting upon the subject.

This motion was carried, and, in compliance with the invitation, Dr. Loring addressed the Convention. He said.

MR. PRESIDENT AND GENTLEMEN, - When I accepted the invitation to be present at this Convention, it was intimated to me, that a part of my duty, as President of the New England Wool-Growers' Association, would be to present certain views of the interests and wishes of wool-growers generally, as I understand them, to the Convention. I was also requested to prepare myself, - always a safe request, and always a safe thing to be done by gentlemen who are placed in a prominent position over any body of their fellow-citizens, and especially in a time like this, when we are endeavoring to harmonize two great interests in this country. A careless word, dropped here accidentally, in unwritten debate, might awake an ill-feeling which hours would hardly dispel. I have, therefore, prepared myself, at the request of the distinguished gentleman who asked me to appear here; and I am exceedingly obliged to my friend from Ohio, who has given me an opportuity to present these views: and, more than all, I feel under obligation to the President of the National Association of Wool Manufacturers, for the tone which he has given this Convention. It must really be a source of infinite satisfaction to the great body of wool-growers in this country, who should be producing wool enough to supply all the spindles of the country, to know that the President of the National Association of Wool Manufacturers desires that they should derive all their raw material from United States soil; and I therefore, with the more pleasure, address the Convention. I may travel over more ground than some of you older gentlemen might deem necessary; but you must remember that some of us are yet young in this work, - speakers as well as hearers.

I suppose this Convention of wool manufacturers and wool-growers, has been called together for the purpose of devising some plan of governmental protection, which shall be of equal advantage to both of these great branches of industry. That both are entitled to protection, I think no man will deny. That either should be protected at the expense of the other, I think no fair practical man will claim. In order that we may approach some definite understanding of our necessities as farmers and manufacturers, and of our relations to each other, I propose to review briefly the wool trade and wool tariffs in this country and elsewhere for the last few years.

If we will turn our eyes abroad, we shall find that, in every instance where wool manufactures have flourished, it has been under the protecting arm of the government, shielding its citizens against foreign competition. From the days of Edward III. until now, England

has pursued this policy, and has fed and clothed and enriched her people, by covering her hills with flocks, and multiplying large manufacturing towns within her borders. For many centuries she made every thing subservient to that handicraft, upon whose success depended the development of the industrial power of her people, and the growth of her trade and commerce. France learned the same policy under the Great Napoleon. Austria, by duties almost prohibitory, has elevated herself into the front rank of manufacturing nations, supplying its own population, and exporting to every quarter of the globe, goods of the highest cost and most elaborate finish. Sweden owes almost her entire prosperity to her devotion to her manufacturing population. Russia has risen on the same policy, from a strictly agricultural nation, to a degree of manufacturing wealth and prosperity almost unparalleled, in the short period of half a century.

In our own country, we have the remarkable spectacle of an active, intelligent, and industrious people struggling against repeated financial convulsions and every variety of tariff policy, to develop an industry upon which much of our prosperity depends.

We have had the tariff of 1832, in which wool, valued at less than eight cents per lb., was imported free of duty, and all wool of higher value were protected by a duty of forty per cent and four cents per lb. At the same time, woollen manufactures, kerseys, &c., the value whereof shall not exceed thirty-five cents the square yard, cheap woollen goods, in short, required on the plantations of the South, for the manufacture of which our wools and labor were particularly adapted, were admitted at a duty of five per cent; high cost woollen goods, at a duty of fifty per cent. It is not difficult to understand this policy now. We understand now what it meant; and we should have understood what it meant then.

The tariff of 1842, imposing a duty of five per cent on all wool costing less than seven cents per lb., and thirty per cent and three cents per lb. on all wools costing over that sum, had hardly begun to manifest its beneficent influences, when a return to the old policy of sacrificing every interest to what were called the great producing sections of the country, when the destructive tariff of 1846 levelled wool and woollen goods alike, and reduced sheep and mills to a mere nominal value.

The tariff of 1857, which found our clip of wool, under the influence of those tariffs already mentioned, reduced from 52,500,000 lbs.

per year to less than 40,000,000 lbs., served to stimulate manufactures somewhat, and also found us very much at the mercy of foreign producers for our supply of raw material. From this tariff the American wool-grower could derive but little benefit; the foreign producer having almost the control of the market.

The tariff of 1861, with the addenda of 1862, 1863, 1864, and 1865, has somewhat established for the first time the true relations which should exist here between the producer and consumer, between the wool-grower and the wool manufacturer. Whatever may have been the cause of this manifest change in the policy of the government, the two great branches of industry, represented in this Convention, should consider it as the commencement of a firm and even prosperity for both.

This, I am confident, must and should be the policy of our country for the future. A recognition of the true relations which exist between the manufacturer of the East, and the wool-grower of the West and South, can alone give firmness and prosperity to each. It needs no elaborate argument to prove that the domestic market for American wool should be the best market. The same prosperity which has attended the growth of manufactures in other countries must attend their growth here. That great system of free-trade which exists between the States demands for the foundation of our domestic commerce an equal development of each section, and energy, activity, and success in each special branch of business. New York and Boston. the two great centres of manufactures, the two great wool markets of the country, offer facilities for trade, which can be found by us in no foreign port. Lowell and Lawrence, and all the manufacturing villages of the North, afford the American wool-grower his most convenient market. And it is upon the growth and vigor of this section, that the wool-producing sections of the United States must depend for their largest and most reliable, sure, and constant profits.

On the other hand, where can our mills look for the raw material, out of which to manufacture certain classes of goods, with more propriety and to better advantage than to our home production, so far as it goes. The styles of wool produced within the limits of the United States are adapted to those fabrics which we have succeeded thus far in manufacturing to the largest profit. And there is no reason why the American manufacturer should not patronize that territory included within the boundaries of his own government, by providing himself with the raw material from thence, and by availing himself,

in return, of that market for his manufactured goods, which is good in proportion to the sale it meets with, for its agricultural products.

When our great agricultural districts raise wool not for the domestic market, and our mills produce cloth not for home consumption, a blow will be struck at that great opportunity for even prosperity to all which is offered us by our free government, with its equalizing laws of trade between States and sections. One great source of our national strength consists in the diversity of our resources, and the extent of our territory. Never before has a people been found able to live within themselves, alike prosperous through the enjoyments of peace and the trials of war. And this power and strength we shall retain if we will but recognize the obligation which rests upon us to develop our various resources by mutual aid and dependence.

That the present system of protection is beneficial to the wool-grower and manufacturer, or has thus far been, is evident from the statistics of trade at the present time as compared with the past. In 1860 we produced 60,264,913 lbs. of wool. In 1864 we produced 80,000,000 lbs. And so far was this latter clip from supplying the manufacturers, that we imported 72,734,503 lbs.; nearly 70,000,000 lbs. of this were imported into Boston and New York alone; and a large portion for the manufacture of such goods as are suited to our common wants, the English and other long combing-wools constituting the smallest partion of the importation.

This increase has taken place, I am aware, during a period of war, in which there was an unprecedented demand for woollen goods, especially for those adapted to army use. But when we remember the vast amount of new industry which is brought into existence, the great territory which has been opened, the increasing markets which have been developed by the advent of peace, we may be assured that our manufactures have a future before them as encouraging as any period of the past. That they may derive the full benefit of the present state of affairs, the wool interest is entitled to the most encouraging and careful legislation. Such duties on manufactured goods as will remove all competition from foreign manufacturers; such duties on foreign wools as will encourage wool-growing here, - these we require from the fostering hand of our government. While I look forward to a supply of cotton from this country, which will not only furnish our own mills with raw material, but will also control the markets of Europe, and thus give America the command of the cotton trade, by the natural laws of production, I look to some pro-



tective measures to give our wool trade an equally powerful position in the commerce of the world. We can export cotton, — for we are without a rival in its growth. We ought not to import wool, — we cannot export it in competition with the cheap lands, cheap labor, and cheap living of our greatest foreign competitors. Our wool business is a home business, both as concerns its growth and manufacture. And we must make the home trade a prosperous one.

I am aware that there are those who will point to the policy of England, in her persistent and successful attempt to develop her wool industry, and remind me that she has protected her manufactures alone, and left her wool-growers to use the market thus created for them. I have not forgotten she has forbidden the exportation of wool, and has thus thrown the wool-grower entirely into the hands of the manufacturer. The export of sheep, even, was prohibited. Her own cloths were prescribed as the material adapted to the costume of many public occasions. She encouraged her manufactures in every possible way,—thus leading on and developing wool-growing, until her product reached nearly two hundred and fifty million pounds. When we remember the small extent of territory in which this large amount of wool is raised, we must admire the policy which has produced this wonderful result.

But England is not America. Her agricultural population, especially the laboring portion of it, constitutes by no means an influential part of the community. They expect a small reward for their toil, and they get it. They are not the largest consumers of the goods manufactured out of the raw material which they themselves produce. England possesses within herself but little diversity of climate, no great extent of territory, no domestic commerce, sufficient to support any large class of people, or to vitalize a great controlling interest. She draws her life from abroad, she returns to foreign markets the fruits of her labors, and she finds in them her chief means of subsist-To establish in an empire like this a great patronizing and ruling class, the lords of the mill, the directors of one great branch of agriculture, the patrons upon whose decrees the success of a large class of dependents hangs, is a work comparatively easy in England. Not so here. The prosperity of the wool-grower should be built upon as firm a foundation as that of the manufacturer; and both should be as sure of a liberal reward for their labor, and a constant one too, as the chances and changes of business will allow.

In considering the claims of wool for protection in this country,

and at this time, we should not forget the effect which our financial condition has upon it, and upon manufactured goods. Our domestic industry is largely stimulated by an inflated and redundant currency. The prices of all commodities, whose value is controlled wholly by a home market, are unusually high. The price of gold as a recognized standard, the high price of labor, the prevailing spirit of speculation all combine to give a market value to our domestic manufactures, almost unprecedented. A high protective tariff, which secures to these manufacturers the full benefit of the home market, also enables the manufacturer to establish his own prices, free from the influence of exchange, or the fluctuations of gold.

None of these advantages does wool enjoy. The price of our domestic wools is established by the foreign market. Like all other articles of export and import, it has followed the price of gold, and has never reached a point corresponding to the rise of manufactured goods, or to the greatest inflations of the war. With Donskoi wool at twelve cents per pound, and Buenos Ayres at nine, and Cape, washed, at seventeen and a half in the English market, the American farmer stands a poor chance; even after reckoning the rates of exchange, and the small duty of three and six cents per pound which is laid upon such foreign wools. The American wool-grower, therefore, finds himself in the hands of the Philistines, not even raised to the dignity of fair competition with his own people, in the management of his portion of the wealth of the nation. It is a striking fact, that while, under the tariff of 1842, wool averaged forty-six cents per pound, under the tariff of 1861, it reached in 1863 only an average of seventy-four three-quarters, with all the pressure of gold, an active market for manufactured goods, and not a superfluous clip. The duties fixed on wool in 1864 were needed to give the wool-grower a proper remuneration at that time.

In addition to these difficulties, the wool-grower and the manufacturer are both laboring under that burden which always attends a disturbance of the currency. In a business like the wool business of this country, which in neither branch finds any outlet through the demands of a foreign market, or through our own power to export at a profit, it is exceedingly important to check importations, and to keep the market healthy and level. At present, however, the rates maintained by gold and currency offer every inducement to the importer, and neutralize that very tariff of fifty per cent which was laid upon imported woollen goods as a protection to the American manu-



facturer. At the same time that gold, as an article of merchandise, holds a position just fifty per cent in advance of the gold standard, almost all other merchandise finds another level, and is, in most instances, one hundred or two hundred per cent in advance of the same standard. All our manufactured goods, so far as my experience goes as a small consumer, and so far as I remember, are in this condition, — inflated by the currency, labor, the tariff, and speculation, to these high rates.

Mark the temptation which this state of affairs presents to the importer. He brings his goods into our inflated markets; sells them at the advances fixed here by our currency, one hundred or two hundred per cent higher than before the war; converts his currency received for his goods into gold, another article of merchandise, at fifty per cent advance only, — making a profit of fifty per cent, or one hundred and fifty per cent. He counts up his profits, examines his invoices, adds his expenses and the duties, and, with his gold in his pocket, returns to his work. And well he may return. For he finds that he has, by converting American currency into gold, wiped out the tariff of fifty per cent on manufactured woollen goods, and perhaps secured a profit of one hundred per cent on top of this.

While this state of things exists, the export of all articles raised in this country (with the exception of cotton and tobacco, which are in an abnormal condition on account of the war), such as corn, flour, wheat, provisions, is entirely prevented; for while these articles must be raised at currency prices, one hundred or one hundred and fifty per cent advance, they must be sold for gold abroad, convertible into currency at only fifty per cent advance. All this class of articles, productions of our agricultural industry, costing us one hundred and fifty per cent advance, when sold for gold and reconverted into currency, brings us but fifty per cent advance. Hence it is that flour, corn, wheat, and wool are relatively so low in the market. We produce gold as well as wheat and wool, and in the long-run the same law of trade applies to all productions.

I can conceive of a state of affairs in this country in which "duties on wool should be entirely abolished," with the certainty that our manufactures would thereby be so increased, that a great demand would be created for American wools, for the specific purposes to which they are adapted. But that state of affairs does not now exist. Before a paying demand for American wools can be created ou such a basis as this, our currency must be restored to a sound basis, and

the markets of the world must be opened to our manufactured goods. Until that time arrives, let us hope that all will join in demanding a tariff of equal protection to the wool-grower and the manufacturer.

But it is not from the fluctuations of trade, and the irregular effects of tariffs alone, that the wool-grower has suffered. A sharp and somewhat bitter controversy has been carried on as to the breed of sheep best adapted to his wants, and the wool which he has produced has met with violent opposition. So far as breeds are concerned, the experience of a large portion of our farmers has taught them, that, in almost every section of the Union, both for mutton and wool, the Merino is the most valuable animal of this class, especially in the improved form to which he has been brought by the American breeder.

There is no doubt that a pound of the wool grown upon this animal is more cheaply produced than any other wool that can be grown here. Of its quality, I have only to quote the testimony of John L. Hayes, Esq., the efficient and accomplished Secretary of the National Association of Wool Manufacturers. In his elaborate and learned address to that Society, in September last, he says: "American Merino wool is fitted for fancy cassimeres, in which we excel; for fine shawls, in which we have attained great perfection; for mousselines de laine, which we have of great excellence, and which we owe to our American fleeces. The true value of the fleece of the American merino is for combing purposes, for which it has remarkable analogy with that of France. This country will never know the inestimable treasure which it has in its fleeces, until American manufacturers appropriate them to fabricate the soft tissues of merinoes, thibets, and cashmeres, to which France owes the splendor of the industries of combing-wool at Paris, Rheims, and Roubaix."

The process by which this wool has been developed, is one of those remarkable and sagacious efforts which man has often made, to secure the largest benefit from the domestic animal, accordant with the soil and climate to whose influences he is subjected. The production of the improved short-horn, the New-Leicester, Cotswold, and South-Down sheep, in England, and of the improved American merino on this continent, is a work of human skill, worthy of being classed with those great inventions by which mechanical forces have been brought to perfect submission and usefulness. The Spanish merino, on his arrival here, was an inferior animal, as regards size, shape of carcase, style of wool, and weight of fleece, when compared with that animal

now known in this country and in Europe as the Improved American Merino, a name as appropriate to him, notwithstanding his ancestry. as our national cognomen is to us who trace our descent from almost every "kindred, nation, and tongue under heaven." While the mutton sheep of England are unsuited to our climate and soil, and are neither adapted to the extensive grazing lands where flocks are fed. which are counted by the thousand, nor to the small farm which cannot furnish any luxuriance of food, the merino, as at present developed, seems to answer the want of all American farmers, large and In the size and shape of his carcase, it would be difficult to find his superior. Of that medium size which is best adapted to most of our pastures, and to our winter feeding, his form presents all those points of conformation which indicate a hardy, robust constitution, and great thrift. I have seen prize merino rams and ewes exhibited in New York and the New-England States, whose swelling outline on each side, from the ear to the tail, could not be surpassed in beauty by the finest ship that floats. In liveliness and elegance of expression, in strength of neck, in depth through the heart, in spring and swell of the rib, in straightness of back and width of hip, and depth of loin, and structure of limb, they are excelled by no existing breed of sheep. They are acknowledged by the most prudent and successful feeders to be the most profitable sheep for the stall; and they produce a quality of mutton which has been mistaken by the best judges for the farfamed South-Down. What a picture this, gentlemen, of that "little dirty runt of an animal, neither fit to raise wool, nor fit to eat!" as we have been told over and over again.

I have already alluded to the style of wool which these animals produce. From the fine, short clothing-wool produced by the original Spanish merinoes, with their light fleeces, there has been developed a long-staple combing-wool, measuring from two and a half to three and a half inches in length, devoid of the lustre of some English combing-wools, it is true, but strong, firm, lively to the very ends, and wasting in the card probably less than any wool known. This is the wool adapted to the fabrics enumerated by Mr. Hayes in the passage which I have quoted. It is readily grown from the hills of Vermont to the plains of Texas. It is kept up to the standard of the best quality with comparative case. The weight of actual wool in each fleece of a flock is easily increased by judicious breeding, and without that excessive feeding which is required for an increase of long wools; and, when properly grown, it surpasses all other wools in the amount pro-

duced by each square inch of the animal upon which it is raised. It is profitable wool for the farmer to raise, and profitable for the manufacturer to work, if he will only establish a standard of quality, and purchase in relative proportion, as concerns prices.

We hear this wool abused on account of its weight. The wool which I have described is the highest quality of merino combing-wool, grown in heavy fleeces, in which yolk and oil are properly distributed, and which are protected on the ends by a sufficient supply of gum to keep it from being injured by the weather. These fleeces weigh from twelve to fifteen pounds from the ewes, and from twenty onward from the rams. Such fleeces are not raised without care; but they are indicative of the capacity of the American merino as a woolgrowing animal, and they are, when cleansed, the best wool of their kind to be found in the market.

There are heavy wools, so called, which shrink excessively, and which, when cleansed, furnish but little really good working material. But the wools to which I refer, shrink to something upon which the manufacturer can depend.

The true value of this wool is becoming more and more acknowledged. Disappointed breeders, and too many buyers, still continue to decry it; and the disparaging phrases, "grease and tar and dirt," are the common weapons now employed by those who flippantly abuse the millions of merinoes which are owned in the United States, and the system of breeding by which the profits of these flocks have been increased threefold.

Let not the wool-grower nor the manufacturer be alarmed by this talk. The American farmer, with his heavy taxation, his proper personal necessities, his care for the education of his family, and the maintenance of good institutions,—to which you have already alluded, sir,—and with the prices of labor and feeding generally, cannot afford to raise light fleeces. I mean by this, fleeces cleansing to two and a half and three pounds of wool. This may be done by nomads, by serfs, or by those who live on the confines of civilization, and in latitudes where sheep require but little shelter. But it cannot be profitably done in most sections of the United States. It is heavy fleeces, then, which our wool-growers want, and which will most benefit our manufactures. To produce these fleeces, the wool-grower must also produce a certain proportion of oil; and, up to a given point, the increase of wool may be measured by the increase of oil. It is not just, therefore, to charge upon the wool-growing community, that

they are dealing in "tar and dirt," while they can demonstrate that their growth of clean wool is increased by a proper attention to grease and yolk, and that the quality of the wool may be improved by this attention.

The skilful breeder knows this. If he has a flock of light-shearing sheep, he may not select a dry ram, with any hope of increasing the clip of his future flock. It is only by using a greasy ram that he can accomplish his object. And this is owing, not to the grease alone, but to the fact, that with a proper secretion of oil and yolk, usually go those other points which make a ram valuable, — such as firmness and thickness of fleece, uniformity of style over the whole body, complete covering of the whole surface, and that most attractive feature of a good sheep, a well-woolled head, and a clean, strong, expressive face. A dry-fleeced ram may possess these points, but it is seldom; and, if he does possess them, he can seldom transmit them.

The wool-grower must not be discouraged, then, in his production of heavy fleeces; for in this way, and in this only, can he increase his production of clean wool, and multiply the profits of his husbandry. This is known now throughout the United States.

I consider, therefore, that, -

- 1. The American improved merino is capable of producing more clean wool on a given surface of body, and with a given amount of food, than any other breed of sheep.
- 2. That American merino wool is peculiarly adapted to those fabrics which constitute the most profitable American manufactures.
- 3. That, to bring this wool to its highest degree of perfection, that system of breeding which has been adopted in developing the best of these sheep should be pursued by wool-growers generally.
- 4. That shrinkage is no loss to the wool-grower, inasmuch as with light fleeces he is engaged in raising the most expensive wool.

One word, now, with regard to the purchase and sale of American wool. Manufacturers must be aware that this business has been pursued without proper discrimination. The rule, that washed wool is washed wool, and unwashed wool is unwashed wool, has been followed with too little judgment. To shrink unwashed wool one-third in purchasing is considered a wise and proper precaution by purchasers generally, knowing, as they must, that it is often the washed wool upon which there is the greatest loss in manufacturing, and that unwashed wools do not shrink alike. The injustice arising from this custom is a mere incentive to fraud on the part of the wool-grower,

who resorts to every expedient by which he can sell the heaviest washed fleeces.

May we not, then, abandon the system of sheep-washing altogether? It is injurious to the sheep, fails to secure clean wool to the manufacturer, and complicates the business of buying and selling. An intelligent purchaser can judge, or ought to be able to judge, of the quality of the wool he is buying. If wool is presented to him uniformly as it was shorn without washing, he can exercise his judgment, and make his comparisons fairly. I believe that in this way the market for American wools can be equalized, and the comparative merits of Vermont, New-York, Ohio, and Texas wools would be thoroughly ascertained and fixed. I trust this Convention will take some combined and definite action on this point.

In the views which I have presented with regard to the relations which exist between the wool-grower and the manufacturer,—between the producing and manufacturing sections of our country,—I have endeavored to ascertain what is for our highest mutual interest. The wool business, in all its branches, should be a domestic trade. The market for woollen goods in this country is ample,—so ample that the foreign manufacturer finds many temptations here presented to him at the hands of the importer. Our interest should confine us at home, especially in a branch of trade in which we produce nothing to export, but are constantly compelled to supply ourselves by importation. Is it too much to expect that our great wool-growing districts will one day furnish us with an abundant supply of the raw material, and that our mills will fill our market with manufactured goods? I think not.

But not by controversy and contention and rivalry can this be done. We cannot bite and devour one another, and bring success to this great national industry, which is represented in all its branches in this Convention. Can it be expected, that the West, smarting under the impoverishment which follows a hard wool market for her, a market glutted with foreign wool, will be ready to protect the manufactures of the East from the competition of the importer? Can the East, whose mills are silenced by low tariffs, and the financial troubles to which I have alluded, bend her energies with good-will to the protection of American wools? Oh, no!—whatever may be the necessities of other branches of business, ours requires entire harmony of feeling, and reciprocal effort, between those two great sections where are found the producer and consumer.

And, more than all, may we not create through our business that bond of union which has once been broken by rivalry and bitterness of feeling, engendered by striving interests? That pestilent theory, that one section of our country was flourishing at the expense of the other, — what folly of nullification did it inflame? in what horrors of civil war did it end! I trust we shall not forget this. For we may, if we will, establish a policy of mutual benefit, whose prosperity shall be even and permanent, and which shall make manifest the social and civil elevation which may grow out of a just and fair distribution of the protection of government, and of the commercial energy of a people whose domestic trade is free and untrammelled.

The question was then put on the motion for the appointment of a Business Committee, and carried.

The Chair announced the Committee as follows: Rowland G. Hazard, of Rhode Island; Henry Clark, of Vermont; N. Kingsbury, of Connecticut; Samuel P. Boardman, of Illinois; J. M. McConnell, of Illinois; Theodore Pomeroy, of Massachusetts.

On motion of Mr. E. B. Pottle, of New York, a Committee on Resolutions was appointed by the Chair, consisting of one member from the New-England Society, one from each State Wool-Growers' Association, and an equal number from the Manufacturers' Association, as follows: E. B. Pottle, of New York; E. B. Bigelow, of Massachusetts; Edwin Hammond, of Vermont; T. S. Faxton, of New York; George Kellogg, of Connecticut; George B. Loring, of Massachusetts; A. Pope, of Ohio; R. M. Montgomery, of Ohio; J. Eddy, of Massachusetts; E. Stetson, of Wisconsin; David Oakes, of New Jersey; A. M. Garland, of Illinois.

The Convention then adjourned to two o'clock, P.K.

AFTERNOON SESSION.

The Convention met pursuant to adjournment, the President in the Chair. Mr. R. G. Hazard, of Rhode Island, from the Committee on Business, reported the following subjects for discussion:—

First, The tariff and internal revenue.

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Second, The reciprocal and mutual interests of wool-growers and wool manufacturers.

Third, The marketable condition of wool best suited to promote the mutual interests of wool producers and manufacturers, including the one-third shrinkage rule.

Fourth, The wool best adapted to the various manufactures, especially that of worsted.

On motion of Mr. W. F. Greer, of Ohio, the report of the Committee was accepted.

Mr. J. W. COLBURN, of Vermont. — I would inquire if there is a copy of the present Tariff Bill here. If so, I would like to have that part of the bill which relates to wool and woollens read, so that we may understand what the tariff now is.

Mr. George Geddes, of New York.—It seems to me that the first subject proposed by the Committee is rather one to be referred to a Committee to report upon. It would take, I have no doubt, all the time this Convention would be willing to devote to this whole business, to discuss that matter. A Committee might make a report upon it, but I cannot believe it is a very good topic for discussion here. I would suggest, therefore, that the President read the second proposition of the Business Committee.

The President.—I would remark, that, when the Committee on Resolutions report, they will probably present something tangible on the subject. These topics were laid before the meeting for general discussion, without particular action, merely to call out the views of the members present. It was supposed that perhaps it could be done a little better after the resolutions were brought in by the Committee; but still there is nothing to prevent any remarks that any member sees fit to make.

The second subject for discussion was then taken up, to wit, the reciprocal and mutual interests of wool-growers and wool manufacturers.

Mr. H. Currs, of Vermont. — I would like, sir, to make a few remarks, and perhaps I may as well make them upon that question as upon any other. I have not come here prepared with any written speech, nor have I been requested by any person to prepare myself; but still I hope, unprepared as I am, that I shall be able so to tame and temper

my remarks, that they shall not tend to disturb that harmony which I am very much pleased to see so far exists between the two interests, the wool producers and the wool manufacturers. I think that such harmony is very important. Their interests seem to me to be mutual; and, in some respects, dependent on each other. It is certain that it is necessary to the wool-grower that he should have a sure and permanent market for his product in his own country; and, in order to do that, it is necessary that the manufacturer should have success in his business, and be able to carry it on successfully and profitably. It is also for the interest of the manufacturer to be able to depend upon his own country for the raw material which he manufactures; that he shall not be at the mercy of foreigners in regard to his supply, but shall be sure to have it produced in his own country, if it can be. Any thing that should tend to make it unprofitable or unsafe for the wool-grower to raise wool, would be ultimately against the interest of the wool manufacturer; for that would tend to make wool scarce in this country, and consequently raise the price, and he would be obliged to pay the foreigner whatever he might ask for it. Now, I apprehend that the present state of things tends a little that way. I would like to have a free discussion of that subject, and every thing relating to it.

It seems to me, that the price of fine wool, as compared with the price of cloths manufactured from fine wool, is at present extremely low, and hardly remunerative to the producer. When we take into consideration the very high price of labor, and the increased tax which the wool-grower has to pay, it is certainly doubtful whether, with the present encouragement he has in its sale, he can go on and produce it in the quantity he has done. I think he cannot.

Now, sir, let us inquire to what this is owing. What is the cause of the present low price of wool? I do not pretend to be able to tell all the causes which have produced this effect, but I think I can point to some of them. One is the defective operation of the tariff. That, I believe, as has been suggested here, can be improved by avoiding certain frauds that are now perpetrated at the custom-house; and an excellent suggestion has been made, that we should have a committee to go to the custom-houses, and see how that tariff is carried out; and see whether the views of the Government are carried out or its laws evaded. It is my opinion that those laws are evaded. All ad valorem duties are extremely liable to be evaded. I am aware, and it is doubtless well known to all gentlemen here, that the British

Government, who have been remarkable for protecting their own industry, never succeeded in doing so until they took particular pains to have their views carried out at the custom-house, to prevent frauds there. To prevent these frauds, it is of great importance that we have specific duties rather than ad valorem duties. These ad valorem duties are easily evaded, because the foreign shippers can make such a valuation as they choose; and it is well known that they have two invoices, one giving the real cost, and the other made up (and sworn to, too) to be presented at the custom-house, for it is well known to the foreigner that a custom-house oath is to be bought very cheap. Therefore these duties amount to nothing; and, though we have specific duties, they are so low, that they amount to nothing. What is a duty of three cents a pound on wool, when we consider the price of labor here as compared with that abroad? It is a mere nothing. It is necessary, then, I think, that we should have a more efficient protection on wool than we now have, - higher duties, and those duties thoroughly and efficiently enforced.

Then the unsettled state of the currency of the country is another reason why wool is depressed. There is a feeling that the attempt may be made to resume specie payments; and this makes the manufacturer, as he should be, cautious in buying large quantities of the raw material. In consequence of that, I understand that it is now the fact, that instead of supplying himself with a year's stock, or six months', or even three months' stock, he buys from day to day, or from week to week. That leaves large amounts in the hands of the wool dealer, and, of course, has the effect to depress the price.

Well, sir, there is another thing that operates against the producer,—for I think this should be a free discussion, and we should not hesitate to say every thing we think is true in regard to the matter. I think there is another thing which has tended, and does now tend, to keep down the price of wool, and Vermont wool especially; and that is, the impression that Vermont wool shrinks more than any other wool. Now, I intend to put the blame of this where it belongs, if I can, and nowhere else. I believe the manufacturers are a great deal to blame in this matter. I believe they have not made sufficient discrimination in their purchases of wool, and that they must take the blame for encouraging the production of wool that shrinks very much, because they have paid as much, or nearly as much, for that as they would for wool that shrank but very little.

At this point Mr. Cutts gave way for the report of the Committee on Resolutions.

Mr. E. B. POTTLE, of New York, Chairman of the Committee, said,—

It gives me great pleasure to say, that the series of resolutions which we shall report to this body have been agreed upon unanimously. Perfect harmony and unanimity have marked the proceedings of the Committee from beginning to end. The Committee report the following resolutions for the consideration of the Convention:—

"Resolved, That, of the great industries with which the people of the United States can occupy themselves to advantage, the woollen interest is especially commended for combining and developing in the highest degree the agricultural and mechanical resources of the nation.

"Resolved, That the mutuality of the interests of the wool producers and wool manufacturers of the United States is established by the closest of commercial bonds,—that of demand and supply; it having been demonstrated that the American grower supplies more than seventy per cent of all the wool consumed by American mills, and, with equal encouragement, would soon supply all which is properly adapted to production here; and, further, it is confirmed by the experience of half a century, that the periods of prosperity and depression in the two branches of woollen industry have been identical in time, and induced by the same general causes.

"Resolved, That as the two branches of agricultural and manufacturing industry represented by the woollen interest involve largely the labor of the country, whose productiveness is the basis of national prosperity, sound policy requires such legislative action as shall place them on an equal footing, and give them equal encouragement and protection in competing with the accumulated capital and low wages of other countries.

"Resolved, That the benefits of a truly national system, as applied to American industry, will be found in developing manufacturing and agricultural enterprise in all the States, thus furnishing markets at home for the products of both interests.

"Resolved, That it shall be the duty of the respective Executive Committees of the National Manufacturers' and National Wool-Growers' Associations to lay before the Revenue Commission and the appropriate Committee in Congress these resolutions, together

with such facts and statistics as shall be necessary to procure the legislation needed to put in practical operation the propositions therein set forth.

The report of the Committee was accepted.

Mr. Cutts then continued his remarks, as follows:—

When the Committee came in, Mr. President, I was remarking upon the necessity of the wool manufacturers making more appropriate discrimination in their purchases of wool than they have hitherto done. It is well known that they have not been very discriminating, but have paid as much, or nearly as much, for wool that shrunk excessively, as for that which shrunk very little. It seems to me that this must be against their interests. Many people for a long time stood out, and attempted to raise the best kinds of wool, and with the least shrinkage; but the manufacturers did not second their efforts, and many men undoubtedly have been driven into raising the very heaviest gross weight fleeces from this very action on the part of the woollen manufacturers; and but for that, perhaps, those sheep that now sell at such high prices in Vermont would not be considered the best. That is to say, but for that, sheep that would raise the most actual wool, at the least expense, might be considered the most valuable, and might sell at the highest price. Such is not the case, I imagine. But, whether it is or not, that matter will be tested by the practical test which is now coming into operation; and that is, the public shearings, in which the fleeces are weighed unwashed and unshrunk, and then the actual amount of wool is weighed, so that we shall know the quantity of wool raised from them.

Now, sir, I would suggest to the manufacturers, in all fairness, and respectfully, that perhaps they have been a little remiss in this particular, and that it will tend greatly to the promotion of harmony and good-feeling between the producers and manufacturers, if henceforth they will make more discrimination, and pay for wool more nearly what it is actually worth. It is in the power of the manufacturer to encourage the wool producer in this way as much as by the imposition of a tariff on foreign wool.

This morning, Mr. President, we heard some remarks upon the good feeling that should exist, from their community of interest, between the manufacturer and the producer; and I must say, that I coincide with most of them: but there were some few things that I could not well subscribe to. I have been engaged in the raising of

Spanish merino sheep some thirty years, and from that experience I suppose I would have a right to give an opinion; but, sir, it would be far from me to undertake to set up any particular method of breeding, and say that no one must attempt any other. It would be my mind that every breeder should consult his own judgment and his own free-will. In regard to breeding from Spanish merinoes, I have my own opinions, and, with due deference to all others, I would express them. But I do not undertake to put down any other man's opinion. I do not come here at the request of any man, or any set of men, to be the champion of any particular kind of breed; and I would not undertake to cast any aspersions upon those who think differently from me. I was rather sorry at the tone with which my friend (Dr. Loring) spoke of this matter this morning. He spoke of what he called "the improved American merino." I understand from the tone of his remarks, that he means by "American merinoes" those sheep that produce what I will call the heaviest fleeces. Now, the question is, What is the heaviest fleece? Because, when you talk of a fleece, you should mean a fleece of wool. do mean wool, then that is the heaviest fleece that has the most wool in it; but if you mean that that is the heaviest fleece that contains the most weight, no matter what it consists of, that is another thing. The gentleman, as I understood him, described that class of sheep whose fleeces weigh the most in gross weight, and of course shrink the most, and have the smallest amount of actual wool in them, in proportion to their gross weight. Now, sir, I am not prepared to say that no one shall attempt to make an improvement on these sheep. I am willing to accord to the gentlemen who have raised this kind of sheep all the merit they deserve, - and they certainly deserve a great deal. If their object was to raise sheep that would sell for more money than any others, - and that was their object, I suppose, - they have succeeded. If it was their object to raise sheep that would yield the most wool in proportion to the cost, I am not sure that some one else may not be as successful in another mode. I think every one is at perfect liberty to make the attempt. If any man should think fit to undertake to improve still further upon these American merinoes by raising the weight of actual wool produced by them, he has a right to do so, without being subjected to any aspersions, and without being told that he ought not to raise light fleeces, and that he is a lighter man than those who raise heavy fleeces. I don't think it is becoming to make such remarks. I believe the heaviest fleeces from these American merinoes are, in gross weight, from rams, twenty-five to thirty pounds; from ewes, ten to fifteen pounds. Well, out of those rams' fleeces that weigh from twenty-five to thirty pounds, the most cleansed wool that has been got has been some seven or eight pounds. Now, suppose some one else should take it into his head, wisely or unwisely I don't care, to raise sheep that, instead of yielding fleeces weighing twenty-five or thirty pounds, won't go up above fifteen or twenty pounds, and yet, when cleansed, will yield a little more actual wool than the other, which would be the best sheep?

Mr. E. B. POTTLE, of N.Y. — Mr. President, I rise to a point of order. I call for the reading of the subject under discussion. There must be a limit to this kind of debate. We are not sitting here for the purpose of deciding the merits of the different breeds of sheep raised in Vermont. We have come here for a specific purpose; and, however much I should be gratified in listening to the remarks of the gentleman from Vermont on another occasion, — and I certainly should be very much gratified, — I cannot think they are pertinent to the object of this Convention. If there is any thing in the questions submitted by the Committee which justifies the debate, I have no objection to its going on; but, if not, I raise the point of order.

The PRESIDENT.—The gentleman had commenced speaking on the report of the Business Committee, before the other committee entered the room. I confess I am not particularly acquainted with parliamentary rules; and I am not prepared instantaneously to decide whether their bringing in that report cuts him off or not from finishing the remarks which he commenced to make on the report of the Business Committee, when he was undoubtedly in order. I would prefer, myself, to waive the question, and allow the gentleman to proceed; leaving it to his magnanimity and sense of propriety how far he shall carry the debate outside of the resolutions. Please to proceed, sir.

Mr. Currs. — It is far from me, sir, to attempt to carry the debate outside of the limits of legitimate discussion. I have had no idea of doing so, and it does not seem to me that I have; and I certainly shall try to avoid it.

I was remarking, I think, that we should, in my opinion, have liberty, as breeders, to breed very much as we think judicious; and I would say, in addition to that, that it seems to me, that, if such a breed of sheep as that to which I have alluded should be raised, it would

have a good effect, not only on the interests of the wool-grower, but of the manufacturer, inasmuch as he would not have to purchase so much that is of no advantage to him.

There is another remark that I was going to make, which I hope no gentleman will think is without the legitimate pale of discussion; and that is, that it is my opinion, as a breeder of some thirty years' experience, that no species of merino ram ever produced more than twenty pounds gross weight of fleece, without excessive feeding or excessive housing; and ewes not over ten or twelve pounds, without unnecessary feeding or unnecessary housing. That being the case, sir (and I express it as my opinion; I don't wish any other man to be converted to it; I say so because I think so), it seems to me more advisable to raise such sheep as can be raised without any unnecessary treatment of that sort. They would yield more wool, and be of more benefit to the manufacturer, and more benefit to the wool-grower, if wool-growing is the legitimate business of the wool-grower; and I take it to be so, and nothing else.

I think, therefore, there may be something still better than the American merino; and while I would give unbounded credit to the man who has made any improvement upon the Spanish merino sheep, as it came to this country, I am not sure that a man might not today, if he could find what he was sure was a full-blooded merino, put the improvements upon that sheep himself at much less expense than it would cost to procure one that has been already improved.

I make these remarks from my impressions after thirty years' experience. The gentleman who spoke this morning has not had so much; and yet his superior subtlety and ability to penetrate into the causes of things may enable him to have more information upon the subject than I have; and yet I think I have a right to this opinion. If, sir, I have gone, in these remarks, one step beyond the line of legitimate debate, I hope I shall not be treated as our poor prisoners were when they crossed the "dead line."

Dr. George B. Loring, of Massachusetts. — I do not wish to take up the time of the Convention, except in a proper and legitimate way. I can conceive, that the remarks of the gentleman from Vermont, as applied to the question as to the relation which exists between the wool-grower and the wool manufacturer, were appropriate on his side of that question; and, when it comes again before the Convention, — as I understand it is now upon the table, pending action upon the resolutions, — I should like to have an opportunity to reply.

The President. — The question is now upon the resolutions. We will dispose of them first.

Mr. COLBURN, of Vermont. — I move their adoption.

Mr. George Geddes, of New York. - Mr. President, It is said in these resolutions, that we furnish seventy per cent of the wool manufactured in this country. Now, the fact that we do not furnish all that is manufactured, proves that there is some lack of inducement to do it; because, if there had been sufficient inducement, we should have furnished, all along, all the manufacturer desired. Now, sir, let me call the attention of this body to the present state of things. Before the war which has lately closed, wool was higher in gold than it is now. I speak from my own personal knowledge. I, and my son after me, sold our wools steadily, for eight years in succession previous to the war, for never less than fifty cents a pound; and at no time since the repression of specie payments have we been able to get fifty cents in gold, although I am quite sure our wool has improved very much in quality and condition. Now, sir, the manufacturer of cheese has been able to get a great deal more gold for his product; the raiser of grain, in general, has been able to get more. The consequence is inevitable, that there is less encouragement for the production of wool than for the production of other farm produce. Farmers are a long-enduring people. It is a fact, that women made butter for a shilling a pound for generations, and thought it was a pretty fair price; but there sits a man at the head of that table [X. A. Willard, Esq.], who has proved that the milk to make a pound of butter must have cost all these women got for the butter. I mention this to show how cheap farmers are willing to work. And now, if it was true that we could not make more money, or could not live better by the production of other things than by growing wool, we should grow more wool. The price of meat is inordinately high. Ordinary beef is selling in this market for \$11 a hundred, by the side. That is more gold, a great deal, than we got for beef before the war. Now, sir, we shall surely cut our sheeps' throats unless we can get more money for the wool. I say this to these manufacturers. I feel that somebody should say it. I have on my farm - or rather my son has — a flock of sheep that are pets of mine. All my active life has been devoted to their improvement. I have held on tenaciously to those sheep. But, sir, it is demonstrable, that if my son had, last fall, cut the throats of every one of them, and flung them into the manure heap, his hay and straw and corn-stalks would have brought

more money in the market than their wool and carcasses would bring to-day.

Now, sir, what is the remedy of the farmer, when he finds himself in this condition? It is to give his sheep a bushel of corn apiece, and in sixty days they are fit for the butcher's knife. That is his remedy. It would be most disastrous to the great economical interests of this country if this should be done; for you cannot afford to strike out of existence these fine flocks. I lay it down as a principle, Mr. Chairman, that fine sheep are to be produced in all the country east of the Mississippi River, in connection with the raising of grain. They fit in exceedingly well with a crop of grain. They consume the straw, the corn-stalks, and the refuse fodder that come from the grain crop. They work in exceedingly well with it; but if they work in at a loss, as present prices show, then they won't work in a great while.

Now, I don't say that the manufacturers are to blame that this thing is so. I don't believe they are to blame. I recognize the common interest in this matter perfectly. As a producer of wool, I recognize that I am a partner with my friend Faxton, at Utica, who makes it up. But my part of the labor and his part of the labor are distinct; and it is the common nature of man, when he comes to me to trade, that he shall buy my wool as cheap as he can, and I shall get as much as I can if I sell it to him; and if this Government will permit him to go to Buenos Ayres, and buy his wool at a lower rate than I can afford to sell it, he won't buy much of me, unless I sell it at a loss. Now, that is exactly where we stand to-day. We have got scattered through the State of New York some inestimable flocks of sheep. We shall take them to the shambles. No property is converted into money quicker than they are. Six weeks turn an ordinary conditioned merino sheep into good mutton. A pound of corn a day will do it. I don't say I shall advise this to be done in our own Why? Because, when a man has been almost forty years doing a thing, - devoted his life to it, and travelled far and near to learn a little about it, - it is hard for him to give up and say, "I have been at work all my life for nought." I would rather live on, in hopes that some change will take place for the better. But how many men, who have flocks of forty, fifty, or a hundred sheep, will reason in this way: "I will hold on to these sheep; Congress will put a tariff on wool; we shall get a fair price for it; and all the wool will be raised in this country that is manufactured here, and a great

deal more will be manufactured, for we ought to manufacture all the cloth that we wear out"? If we could not do better at any other business than we can at raising wool, we should do it now; but, I say, the fact looms up that we can do better, and that the great mass of wool-growers will do better.

Now, feeling, as I have no doubt you gentlemen of the manufacturing interest do, that you must have us raise wool, — that it won't do for us to stop raising wool, — here is an inducement for you to help us get a tariff on wool. And that is the whole point of my argument. If I have said any thing, it has been to try to reach you, gentlemen, through your pockets, and make you understand that you really had better help us. There is no mistake about it.

Now, Mr. President, indulge me in saying that what I believe is fair in this matter is this, - that we should have such protection on our wool as the manufacturer has on his part of the labor. To illustrate: If a yard of cloth laid down here is worth two dollars, and it took one dollar's worth of wool to make it, and one dollar's worth of labor to make it, — if the wool came from a foreign country, — let that dollar's worth of wool that is in it pay just as much duty as the dollar's worth of labor that is in it is protected by the duty on foreign cloth. That is fair. And, when I say I think it is fair, I say it with this meaning, that, when our committee go before these gentlemen who are to propose amendments to the Tariff Law, you manufacturers shall not be sharp, and try to get an act framed that shall give us the appearance of protection, but shall have holes through it big enough to drive a four-horse wagon-load of wool through. Let us meet on this common footing, that, if we work a dollar's worth, it ought to have the same protection that you have when you work a dollar's worth, remembering that this vast debt upon this country is to be paid. We are here the representatives of the producing interests. We are the producers. Where does wealth come from, sir? Why, sir, the labor of man and the fruits of the soil make the whole ability of a nation to pay its debt. We will meet our share of this debt - I speak for the farmer - with perfect willingness; but we ask, that, in order that we may do it, we be put upon an equal whiffletree with all other interests. Having used that word, it occurs to me that right here is the simile. If I was a legislator of this country, and saw that there was not a sufficient quantity of wool produced to supply the manufacturer, I would say, "That end ought to come up;" and I would induce that end to come up. I would even that

whiffletree. And, when I found there was more wool produced than the manufacturers would manufacture, I would say, "I will bring up that end." In legislating on this subject, I would look precisely to this end,—that this country should produce all the wool that it wanted.

I don't know but I have said too much, and talked too long; but I have just given the views and feelings of a farmer.

Mr. George W. Bond, of Massachusetts. — I rise to correct a statement of the gentleman last up. What he has said in regard to the price of wool, since the war, may be his own experience; but it does not apply to wool generally. The Secretary of the Treasury, in his "Report on the State of Finances for 1863," table 39, showed the range of prices in New York, for various articles, for thirty-nine years. From that, sir, the following extract was made, to show the comparative prices between the year 1860, before the war, and 1863, after the war. The average advance on gold was 45 per cent for the year 1863. The average advance on wheat flour was 111 per cent on the gold price; on corn, 20 per cent; on mess beef, 34 per cent; on butter, 152 per cent; on cheese, 442 per cent; on common wool, 81 per cent; and on merino wool, 51 per cent, - thus showing, that, with the single exception of common wool, merino wool paid at that time a higher advance than any of these prominent articles of farming products. It is not stated here; but the single article of oats - which, like common wool, was an article of army consumption — advanced 80 per cent and a fraction. common wool bore about the same advance.

At that time, an effort was made to put a duty upon wool; and I think I can explain satisfactorily to you, sir, and the people present, why no advanced price has been realized by farmers; for since that time, it is true, they have not received so high a price for their wool as they did previously. The movement for a high tariff on wool stimulated importations to an immense extent, as you will see by the tables of imports; so that, in the year immediately following, we imported 75,000,000 pounds of wool, the importers being anxious to get it in here prior to the time when the new duty, which it was evident must be put upon it, should be imposed. Most of that wool arrived in season: a very considerable quantity of it, however, arrived after the first of July, and went into the bonded warehouses. The bare cost of importing Cape wool, with the expenses then bearing upon it, was about twenty-three cents, gold. The average sale of Cape wool, the

first six months of 1864, with a duty of five per cent upon it, was 24.58 cents. The average price for the six months after July, when the new tariff went into operation (the bulk of the wool being held in bond for a long while, and gradually sold out), was about 24^{38}_{100} , or a little less than it brought before the duty was increased, because the market had been fully stocked in anticipation of the duty. The consequence was, that American wool had to bear it pro rata with the other. The large importations, caused by the anticipation of the duty, overstocked the market; and wool manufacturers and wool-growers must find themselves ever amenable to the laws of trade. It is simply to those laws that the fact is due, that not one cent has been added to the price of wool in this country in consequence of the added duty, which is equivalent to ten cents a pound on domestic washed wool. Since that time, domestic wool has not averaged more for gold than it did before; the best clips bringing only about seventy cents, which has been equivalent to about fifty cents in gold.

Mr. R. G. HAZARD. — After the clear and able statement which has just been made by my friend, I do not propose to detain this Convention more than a moment upon a similar point.

It so happened that I argued the case of the manufacturers before the Committee of Ways and Means, when the subject of a revision of the tariff was last considered by them. During that discussion, the question arose, one evening, as to whether wool had not risen as much or more than other agricultural articles. The next morning I went to the statistics at the Treasury Department; and I will read a portion of the argument that I addressed to the Committee immediately afterwards:—

"With regard to the advance on wool, I find, from the official tables, that the average price of sheep washed fleece wool for seventeen years (1843 to 1859 inclusive) was 35½ cents per pound, and that in 1863 it was 71 cents per pound, or just 100 per cent advance. That of five other agricultural products taken at random, — viz., wheat, corn, mess beef, butter, and cheese, — the average advance in 1863 over the average prices of the same seventeen years was only 20½ per cent. But there is another element of advance in domestic fleece wool not taken into account in the tables. At the middle period of the seventeen years, the average loss in scouring good medium wool was 35 per cent, and in 1863 this loss had increased to 44 per cent in the same class of wool; so that, during the average period from 1843 to 1859, the growers sold, on an average, 65 pounds of clean wool for \$35, and in 1863 sold an average of 56 pounds for \$71, — making the cost of scoured wool in the former period 55 cents per pound, and, in 1863, 127

cents per pound: and hence the real advance in price, after eliminating the element of grease and dirt, was over 130 per cent against 20½ per cent average on five other great agricultural staples; and, since 1864, there has been a further advance in these wools of 10 per cent."

Mr. Geddes. — Now, Mr. Chairman, these figures make a very imposing array, and, I have no doubt, are entirely convincing to most of this body; but here stands with me the stubborn fact, that for months and months we have offered in this market a ton of wool at fifty cents a pound in gold, and could not get it, when we used to get it for years before the war. That stubborn fact stands right out.

Mr. Colburn, of Vermont. — I have moved the adoption of these resolutions as a whole, because I think they breathe the spirit of good-will and harmony between the wool-grower and manufacturer. There is the word "equality" there, which I rely upon vastly. The manufacturer has said, in these resolutions, that he is perfectly willing the wool-grower should be protected equally with him; and that is all we ask. Now, sir, if the manufacturers are ready to carry that out, I am sure they will find the wool-growers ready to come in and act with them; but, if they undertake to tell us that we now stand upon an equality with them, it will be up-hill business for them to make us believe it. In the town where I reside, which is eminently a wool-growing town, there is now more wool than was clipped there this year. We have to pay pretty dear there for our labor. Thirty dollars a month for the season; two dollars a day, if we hire by the day; two dollars and a half and three dollars during having; and we cannot grow wool, as my friend Mr. Geddes says, at present prices, and live by it: it is totally impossible. However these other agricultural articles that have been referred to have paid in 1864, or some time ago, they are now paying vastly beyond wool. Butter, cheese, pork, beef, - every thing is paying vastly beyond wool.

Well, sir, as I said before, we would like an equality of protection with the manufacturers of wool: have we got it now? I don't know that I understand exactly what the provisions of the tariff are now; but I have learned one fact from a New-York merchant, since I came here, that speaks volumes. He says that the duties on the quantity of Buenos-Ayres wool which will make a yard of cloth are ten and a half cents; while the duties on a yard of foreign cloth, manufactured from precisely that kind of wool, are fifty-five and a half cents. There is a difference of forty-five cents betwixt the wool that goes into that cloth manufactured here and the foreign article. What kind of equality is

that, air? Well, sir, it is a kind of equality that the wool-growers can't stand, any way.

Now, I don't blame the manufacturers for all this. Human nature is human nature, the world over. If they can get a tariff playing into their hands in this way, without any effort on their part, it is natural they should take it. They will buy their wool where they can buy the cheapest; and we would do the same, were we manufacturers. They are not to blame for it; but the American wool-growers have been to blame, for they have never attended to their own interests, when there was to be revision of the tariff. And the reason is obvious. They are scattered all over God's creation, you might say: a great many of them are small growers, and they don't want to be taxed to send a delegation to Washington to attend to their interests; and so the thing has gone on It is perfectly natural that the manufacturers—and they are the smartest men in the United States - should look to their own interests when there is to be a revision of the tariff; it is not natural that they should look to the interests of the wool-grower, or feel very tender as to the amount of benefit the wool-grower was to receive. They look to their own interests; and we have suffered because we have not attended to our own interests, and had nobody to do it for us.

Well, now we are here to try the experiment, for the first time, of bringing the wool-growers and manufacturers together, to see if they cannot make their interest mutual; and I really hope we shall succeed, after all. I have had some little doubt about it; but I feel stronger since these resolutions have come in, and have conceded equality.

It is a fact that we imported about a third part of the wool worked up last year. Now, why was that so? It was either because there was not wool enough grown in this country, or because the manufacturers could buy it cheaper of the foreigner. I believe that the last reason was the predominant one. They bought more wool of the foreigner because they could buy it cheaper than at home, than because it was not to be had here. Now, I believe it would be a grand thing if we could go on hand in hand, and get an amount of protection in this country, both for wool and woollens, that would become gradually, say in ten years, totally prohibitory. Let us clothe ourselves as well as feed ourselves. We can do it. If I were a member of Congress, I would exert what little influence I could get there to make a tariff that should become, in the end, entirely prohibitory upon wools of all kinds and woollen goods.

Some will say, "Then you are going to oppress the poor. You are

going to make clothing so dear that the poor man cannot clothe his family at all." Well, that string has been harped upon in this country, for political purposes, a good many years. Oppress the poor man! When the Government is ready to give him one hundred and ten acres of land if he can pay ten dollars, if he finds that he can't get sufficient wages to support his family, won't he take up that land, and become a farmer? It is all moonshine to talk about oppressing the poor in this country! There is no country on the face of God's earth where the people are so well off as in this country. We cannot oppress the poor by a high tariff, or any thing of the kind.

I do not wish, sir, to say a great deal on this subject; but I do hope we shall go along in good faith, --- we, the wool-growers and wool manufacturers, - and get this equal protection. I am from the State that Mr. Morrill represents, and I had a talk with him about the tariff of 1857. I told him that tariff did not afford sufficient protection to the wool-grower. "Well," said he, "blame yourselves for it. Why didn't you get your statistics, and come to Washington and show them to us? The manufacturers were there in their strength. They showed us these things, and they had their influence there; and you woolgrowers ought to have been there." That is a fact. Mr. Morrill is an honest man; he means to do right, and means to treat all interests justly; but he was mistaken in getting up that tariff. understand the interests of the wool-grower. I think he is disposed to try to understand them; and, as he is now at the head of the Committee of Ways and Means, it is of the highest importance that we make him understand them, so that, if we get a revision of this tariff, we may get something that will approximate, at least, to equality.

We have had a tariff where the wool-grower was equally protected with the manufacturer. I think the tariff of 1828 gave the wool-grower equal protection with the manufacturer. I think the tariff of 1846, miserable as it was for both interests, protected the wool-grower equally with the manufacturer. But, generally speaking, all these tariffs have been one-sided things; they have operated vastly more to protect the manufacturer than the wool-grower. Still, the manufacturers seem to think,—at least, they claim,—that, if they can be sufficiently protected, the wool-grower certainly must be; that the protection extended to them will reach, through them, to the wool-grower. Well, there is something in that. If you can make manufactures flourish in this country, the manufacturers will be the more ready to buy wool, and they must pay whatever the market value is.

But, if they can buy it threepence a pound cheaper of the foreigner, they certainly will buy it of him; and we cannot blame them for it. If we can put on a duty that will prevent importations, it is certain that we can grow all that is required here. We can grow any amount here, if we can only have the business remunerative. There is no doubt upon that subject.

Mr. Geo. W. Bond, of Massachusetts. — The impression may have been taken, from what I have said, that the wool-growers were to read no benefit from the increased duty on wool. I said that, under the laws of trade, they were reading the results of over-importation. The imports have fallen off about forty per cent this year. These importations resulted in a severe loss.

Mr. GEDDES. — And our prices falling!

Mr. Bond. — Yes, sir; because, under the pressure caused by the anticipation of a high tariff to come, enough wool was imported to supply the market a long while ahead. The wool that is to be imported now will only come in case it will pay its cost, with the duties added. Consequently you will reap the benefit of the advanced duty over and above the cost abroad; though that cost will be affected somewhat by the value here, and by the withdrawal of American competition in the foreign producing markets.

Mr. R. M. MONTGOMERY, of Ohio. — With all due deference to the gentlemen who have spoken on this subject, and with all due diffidence in regard to my own ability, I wish to say to you, sir, and to this Convention, that I am fearful this debate is taking an unprofitable and unhappy turn. And I want to remark, also, that much that has been said is clearly out of order, because the question before the Convention is simply this: Are we ready to pass the resolutions saying that we are in favor of an equality of protection as between these two interests, and equality as between us and the other interests of our country? The question is not whether wool pays as much as it ought to, nor whether we farmers work for nothing and find ourselves; but whether we are ready to come together on this common ground of equality among ourselves and equal rights with others. It seems to me that these remarks about prices and duties are unfortunate at this time, because this court has no jurisdiction. When our committees go before the Revenue Commission, or before the Committee of Congress, or before Congress itself, there is the place to bring forth these statistics, in better form and more accurately than we are able to present them now, and with more effect. We, as producers, are very free to admit

that we are not informed what protection we have had, or have not had, or ought to have. We are seeking information.

Permit me to hope, then, that the discussions of this meeting may take some other turn; that we may agree upon the question whether we will or will not favor equal protection, equal rights, before the Legislature; and then let us turn to some other topic, the discussion of which we can make of practical advantage. For instance, let us avoid the question whether a ram will grow twenty or twenty-seven pounds of wool, or whether it will grow that being well-fed or ill-fed, kept in the house or out of doors; and turn our attention to such questions as these (and perhaps these would be more appropriate for a Wool-Growers' Convention than for this meeting), whether the common wools are produced in superabundance, and whether the finer or coarser wool (what is usually termed the combing-wool) is the more desirable. Perhaps, too, it would be well for us Western people to learn the names of the various kinds of wool, that we may know what we are talking about hereafter.

Another thing occurs to me that would be of value to us wool-growers, and perhaps to the manufacturers also. I have been informed, that much wool, good as it may be when it comes from the sheep, is absolutely spoiled for certain purposes by the kind of twine that it is tied up with: it will not take color. There are abuses of this sort that are prejudicial to our interests. Let us have those abuses pointed out; let us agree upon equality, enjoy each other's acquaintance, shake hands and go home, and come together some other time and have another good meeting.

Mr. H. Blanchard, of Connecticut.—I most cordially concur in the remarks of the gentleman who has just addressed the Convention. I do not rise to discuss the relative merits of the tariff, as affecting the wool-growers and wool manufacturers. I believe that that subject will be more properly disposed of by placing it in the hands of a judicious, intelligent, and capable committee. The inquiries which have been sent forth by the Wool Manufacturers' Association to gather information upon this subject are ample to cover all those points that seem to disturb a little—and I do not wonder at it—the minds of some of my wool-growing friends. If the Wool Manufacturers' Association and the Wool-Growers' Association shall be able intelligently to answer the questions proposed, I think they will be better able to act understandingly on this whole subject. Therefore, while replies might be made to many of the remarks that have been offered, I don't think it

worth while to occupy the time of this Convention in meeting points which to us seem very trivial.

Mr. E. B. Pottle, of New York.—I desire to say, in behalf of the Committee who reported the resolutions now under discussion, that they reported them with the general expectation that we were entering upon a new era, so far as regards these two great interests, the wool-manufacturing and wool-producing interests; and I think I may add, that the general feeling all round the committee room was, that bygones should be bygones. The past cannot be recalled; and whether the present tariff bears equally upon these two great interests or not, is a matter which cannot be determined by a resolution, however carefully drawn. But we can agree upon certain principles,—upon a common platform, where we can all stand; and on that common platform we can commence that work which we believe will be not only for our mutual interest, but for the benefit of all the interests of the country. That was the theory upon which we prepared these resolutions.

Now, sir, if it were politic to devote the balance of this Convention to the discussion of the question with our manufacturing friends here as to whether the tariff of 1857, with all the addenda that have been made to it, bears equally upon these great interests, I have some facts, the recital of which would occupy more time than you would care to devote to it; and doubtless others here have facts of the same character. I think a comparison of views upon that question would hardly leave a single manufacturer willing to rise in his place, and say, upon his honor, that an examination of this question left the impression upon his mind that the producer of wool has been protected by the laws of the country to the same extent that the manufacturers have been. But I have no wish to discuss this question. I wish, with my friend from Ohio, to turn this debate aside from these questions which are calculated to produce friction between these two interests.

There can be no question,—it does not argue common sense in any man to get up and maintain the contrary, upon the great principles of political economy,—there can be no question, I say, that it is best for any country under heaven to produce the articles it manufactures, and manufacture the articles it produces, as far as possible. Any government that is a buyer of the products of a foreign government, when it can produce those articles itself, must of necessity be engaged in a miserable business, to the extent which it does it. As has been said by the friend who preceded me, the true wealth of a nation depends upon the products of the soil, and the labor that is bestowed in fitting those



products for the use of man; and every dollar which we pay to encourage the labor of other countries, to stimulate the production of other countries, is so much taken from our own, and so much taken from the actual wealth of the country. Hence it should not be surprising, that we, who claim to be at least possessed of common sense, representing these two interests, -- the wool-growing and wool-manufacturing interests of the country, -- should come here prepared to lay down, in the form of resolutions, a platform affirming simply the fact of the mutuality of these two great interests; that, looked at from a proper stand-point, - looked at from the stand-point which every good citizen should occupy, a stand-point which compels him to ask, not only for that which is best for him, but which is best for the whole country, -- looked at from that stand-point, I say, no other conclusion could be come to, than that which we have put forth in these resolutions; that is, that the interests of the manufacturer and the interests of the producer are but one great mutuality, and whenever one is unduly elevated at the expense of the other, the country suffers.

Looking this question square in the face, we have concluded, as I said before, to let bygones be bygones. There has been wrestling and struggling between the respective interests that are represented here, as there has wrestling and struggling between other interests; and it must have been of great damage to some of those interests, and of great detriment to the prosperity of the country at large. It cannot be helped that it has been so. As I said before, we cannot recall the past, but we can make provision for the future; and that is all that men can ever do. Are we willing to do it? Are we, as practical men, representing two great interests of this country, - the greatest in magnitude of all the wide-spread and varied interests of this immense country, - are we willing to do that which we are ready to acknowledge is for the best interests of the whole country? We have said, in these resolutions, that we are. Now, is it to be presumed that we have said more or less than we mean? If we mean just what we have said in regard to the matter, then what hinders? Certainly, Congress will not set itself up in opposition to the wishes of these two great interests. There can be no motive in the breast of any member of Congress to lead him to protect and encourage one of these interests at the expense of the other. There can be no reluctance on the part of any member of Congress, or of any branch of the Government, to permit us to carry out in practical operation just what we have said. Well, then, what hinders? Nothing whatever, unless it may be lack of sincerity on our part. Is any gentleman ready to assume that we have come here with the purpose of engaging in a species of double-dealing, - of making professions to the ear which we do not mean to carry out? I will not accept any such insinuation? I think I may say with truth, for every member of the Committee, that what we said in those resolutions we meant; and unless they are carried out in the spirit in which they were drawn, and in furtherance of the purpose they have in view, no set of men will be more disappointed, surprised, humiliated, and ashamed, I may say, than the members of the Committee who have placed those resolutions before you. You must take those resolutions upon the faith that we are men of honor, and mean what we say; that we expect, in very truth, in the language of one of these resolutions, that it shall be the duty and purpose of these two great national associations, — the Wool-Grower's Association and the Wool Manufacturers Association, — to see to it that through the Revenue Commission, and through the Committee of Ways and Means, all the steps are taken that are needful, to lay before Congress those facts which are necessary to carry out all the provisions of these resolutions, in the spirit in which they have been offered, and to procure such legislation, at the suggestion of both these great interests, knocking at the doors of Congress, and asking to be heard in relation to this mutual agreement and understanding, as shall promote the future prosperity of these two great interests.

Now, if I am correct in regard to that, — if that is the expectation of our friends who came here to represent the wool-manufacturing interests of the country, if that is the expectation of our friends who come here to represent the wool-growing interests of the country, why should we differ about the past? Why should we tread upon the old lava that has been burning us up for the last quarter of a century in this country? Why, sir, I think that American industry and enterprise, with that tenacity which my friend (Mr. Geddes) speaks of, which leads Yankee women to make butter at a shilling a pound, even at a loss, if they can get no more, - the never-give-up, never-say-die determination of our country, - I think that would have triumphed over all obstacles, - over the pauper labor and aggregated wealth of other countries, over all the obstructions which we have seen placed in our way, if it had been let alone, and allowed to have scope; but it has not been. The unmistakable curse of this country, ever since I have had any thing to do with public life, has been the continual freezing and thawing of the body politic. A tariff this year, and all the energies of the country turned to adapting its industry to it, and altered the next year; and then, when we got a

little used to the grooves, altered again. This alternate freezing and thawing destroyed the accumulated wealth of those who had based their hopes upon the legislation of the country. This has been going on for years, and has been owing to the fact of the refusal to recognize the mutuality of the great interests of the country, and to provide that kind of legislation which would put them upon a common platform, where all alike could be prosperous. The refusal to recognize this mutuality of interest has led to this continually changing and shifting legislation, until no business man, when he went to bed at night, while Congress was in session, has known whether he would wake up a rich man or a poor man; and men have been disposed to turn up their eyes, and say, mentally at least, "Thank God!" when they heard that Congress had adjourned. This was not because of any lack of confidence in the members of Congress; it was not because they were thought venal or foolish or weak, or any thing of that kind; it was because of this vicious American system, of one interest struggling against another interest, which keeps them rolling and tumbling one over another, this up to-day and down to-morrow, and this down to-day and up tomorrow. Now that can be obviated in only one way, and that is by the other great interests of the country following the example which we are trying to set them to-day; that is, to step forth in the spirit of manhood and patriotism, and say, "We will establish a great American system, which shall be known and recognized throughout the world; for no country is so worthy of our care as our own country, and no interests so need to be protected as the interests of American citizens and of American industry." That is the feeling we should have, and that is the spirit in which we should act.

This debt of four thousand millions, more or less, of which some of our friends have spoken,—it is a large amount of money, but a very small price to pay for the advantages we have gained; perhaps the best bargain we ever made in this country, sharp as we are as Yankees. But that debt will vanish, it will cease even to be a bugbear upon exciting electioneering occasions, as soon as we can act upon the great principle, that the immense resources of this country are to be used for the benefit of these United States. Just recognize that fact; just start with that proposition, that, instead of enriching half Europe by the products of American industry, you intend to enrich your own country; to make it as independent in time of peace as it has been in time of war; to make it self-reliant,—and we need have no apprehensions in regard to our debt. Let the world know that we can not only carry

on a war costing thousands of millions of dollars, without applying to any prince or potentate or government under heaven for the loan of a dollar, relying chiefly upon our own resources, but that we mean, by encouraging the productions of our own country, so vast in extent and variety, to be able to stand up independent of all the world, without shivering, even though non-intercourse should be declared with every nation under heaven for the next eighteen months. When we have reached that point, Mr. President, we shall be truly Americanized, and not until then. When we shall have reached that point, there will be stability in our legislation, and not until then. When we make up our minds to take care of ourselves, recognizing the oneness of the American people, then there will be stability in our legislation, and not until then. So long as there is a scramble to elevate one interest over another, so long as an eagerness to take advantage of the market of this European country or that shall occupy the attention of the business men of this country, so long we shall have unstable legislation consequent upon this shifting policy.

Now, sir, are we prepared to come upon this common ground? Are we prepared to recognize the great fact, that the wealth of a nation is its own resources; that the honor of a nation is its own safest reliance; that the manhood of a nation depends upon standing up squarely on its own foundations, and asking nothing from all the world besides? If we are prepared for this, we are prepared for these resolutions. If we are not prepared for this; if after all this fair talk, after whispering in each other's ears that we have come up to this millennium of good feeling, where all interests shall be alike protected and fostered, we must go back to the shambles, and scramble for the advancement of one interest at the expense of the others,—then our time is lost time. But, if we mean what we have said, the time is not far distant when every other of the industrial interests of the country, not represented here, will thank us from the very bottom of their hearts, for having inaugurated this epoch of mutuality among the great interests of America.

The President.—The debate has taken a somewhat wide range. I think there has been a little misapprehension on the subject. We have really two reports before us; and, under one, some gentlemen have discussed the other. I have no doubt, that, when we come to a vote, it will be unanimously in favor of these resolutions. I do not believe any gentleman here has spoken with any view to oppose these resolutions, or intends to oppose them. When a free interchange of views was invited, and the Business Committee, headed by the honorable gentle-

man from Rhode Island (Mr. Hazard), brought in the topics for discussion, our friends here, with a little want of parliamentary knowledge, have been discussing these topics under the resolutions; that is all.

The question was called for on the adoption of the resolutions, and they were passed unanimously.

The President.—Gentlemen, the business now before the Convention is the report of the Business Committee; and there are some explanations that can be made here by the manufacturers, and possibly some by the producers, that will be productive of a great deal of good. I trust that we shall not, now that the resolutions are passed, immediately break up. I see before me gentlemen who were manufacturers before some of us were born, and are still manufacturing. Let those men, who have grown gray in this business, tell us something about it. We are ready to listen. And, if they want to press a little pointedly upon us, let them do it: our skins are not thin any more than theirs are. Let us discuss this matter freely, and pointedly, if you please, but without asperity.

I wish to ask these gentlemen if they intend to keep up the one-third shrinkage rule. If they do, I give them notice we will have a debate on it.

Mr. George Kellogg, of Connecticut. — I am no public speaker; but I wish to say this upon the subject of the one-third shrinkage rule. I have been a buyer in the market these forty years; and I have never bought on any other principle than to examine the condition and quality of the wool, and pay what I thought I could afford to pay for it. I have sometimes taken the unwashed wool in a lot one-quarter off, sometimes one-third off, and sometimes one-half off. I have never known there was any one-third rule on the subject. If I find two or three fleeces of unwashed wool in a lot of washed wool, I throw them out, and take one-third; I can't afford to stand and talk about it a great while, if I am making a large trade. But my principle always has been to pay for the wool what I judged it to be worth, from its appearance and condition.

There is one other subject upon which I would like to occupy the time of the Convention for a moment. A great deal has been said here about the relative position of wool manufacturers and wool-growers. It has been said that the farmers are a long-suffering people. I have been

a farmer myself, and raised some wool and sold it, before I went to manufacturing. But I wish to say, that since I have been in the manufacturing business, — forty odd years, — almost all the men who have been in that business have broken down in it. I wish to say, from the experience I have had and from what I have seen, that the woolgrowers have had the best end, and the manufacturers have had the worst end. I have lived to see more than one-half, I believe more than two-thirds of the men, who, up to within a few years, went into the business, break down and fail. I don't mention this by way of complaint; it has been the effect of the unsteady legislation of this country. When we got used to a tariff, that tariff was changed, and we had to get used to another. Any intelligent man, — I don't care if he is a wool-grower, — who is able to look back on the last forty years, must be satisfied that the manufacturers have had the hardest end. I have nothing further to say on this subject.

The President (Mr. E. B. Bigelow, of Massachusetts, in the chair). - I wish to say, in regard to the one-third shrinkage rule, that I verily believe there has been a great deal done by swoolbuyers, that the manufacturers are not responsible for. I have no doubt the gentleman who last spoke has acted on the rule that he mentioned. and probably others have done so, -- perhaps half of them, perhaps nearly all. But none the less is it true, that the men who go round the country buying up wool insist on that rule. I imagine that the manner of buying wool is the cause of a great deal of the difficulty between the manufacturers and producers. You, gentlemen manufacturers, know your business a great deal better than I, or any of us, can tell you; but I would like to ask why, when here is a great staple brought into the market, varying considerably in value, you don't send competent men to buy that staple. I want to know why you allow it to be bought up on commission. I have been thirty years and upwards raising wool; and it is absolutely true, as the gentleman from Vermont has said, that the manufacturers have been paying a premium upon dirty wool. Occasionally, a manufacturer sends an agent who is an intelligent buyer, and is used to it; and he buys discreetly and makes discriminations. But. generally, it is not so. Just as soon as the clip is off, half a dozen men are round buying wool on commission (I don't know who sets them at work, whether the manufacturer or the merchant); and I suppose the more they buy, the better they are paid. These men insist on that rule, and we have suffered from the effects of it; and, consequently, as we have got to have one-third taken off if we don't wash, we want to

put in at least one-third grease, and we ought to do it. If you require that we shall sacrifice one-third on every pound of wool because it is greasy, it is certainly our business and our right to supply you with that grease.

Mr. C. H. ADAMS, of New York. — Why should there be any unwashed wool sold?

The President.—In the first place, wool keeps better that is unwashed; it receives dyes better; works better; and there is no reason on earth why we should be told that we should wash it, unless we choose to do so.

Mr. Adams. — We don't tell you so. We simply say that you bring it part washed and part unwashed. Why shouldn't you bring it all washed?

The President. — Because it suits our interest or convenience not to do so. Here are men from the hills and valleys of Vermont, where the snows lie late, and the mountain streams are cold far into the spring; and they don't wish to wash, because, if they do, they cannot get their wool to market in time. Here are men from the plains of Illinois, who can wash in good time, and they do wash. Have you any right to insist that these Vermont men shall wash, when there is a good reason why they should not wash, merely because men who can wash as well as not do so? Your interests do not suffer. If they did, then there would be some propriety in your complaining. But I say, - and I call upon the most experienced gentlemen who are sitting in this body before me, I call upon Mr. Hazard, one of the most experienced manufacturers in the United States, to say if I am not right; I say that wool keeps better in the grease than where it is washed; and, when scoured, it works better, and takes dyes better. If a man living on the plains of Illinois or Indiana or Ohio, or in any other section of the country where the streams are warm early, chooses to wash, because he does not choose to pay for the transportation of dirt and grease, there is no reason why he shouldn't do it; and it is mere caprice to say that he ought not to do it. And if a man lives up in Vermont, or on the highlands of New York, eleven, twelve, or thirteen hundred feet above the level of the sea, where the streams are cold late, and where it is the first of July before he can wash his sheep, why should he not be allowed to send his wool to market unwashed, so long as he don't injure your interests?

I come now to the question of the justice of the one-third shrinking rule. I say I have demonstrated, hastily, that we have a right to market the wool in either condition; and that the manufacturers ought not,

as a matter of propriety, to attempt to dictate to us, as long as we don't injure their interests by taking either course. Now, here is an arbitrary rule laid down, that, if I don't wash my sheep, the wool shall be subject to a deduction of one-third from the price of washed wool. Does the butter dealer, when he goes into the market to buy butter, and puts his butter-trier into a firkin, and finds it not exactly in the best marketable condition, insist that the owner shall submit to a deduction of one-third; and then, when he tries another lot, and finds it not suitable for the table, only fit for grease, say that too shall be subject to a deduction of one-third? Would any butter dealer attempt to buy butter on any such rule? Take the case of wheat. Here are two men who present two samples of it. The buyer examines one sample, and judges there is a pint of foul seed to the bushel. Well, he deducts from the market value of the good article what he ought to deduct for that pint of foul seed per bushel. In the next wagon, he finds wheat that has four quarts of foul seed per bushel. Now, I ask you how it would look in the market of Syracuse, if some one should come along and say, in such a case, "It isn't all good wheat, and you must each submit to one uniform rule of deduction; you must each submit to a deduction of one-third."

I am taking it for granted that I am addressing intelligent men, who are ready to hear these things called by their right names; and I undertake to say there is no other article, in the purchase of which the buyer attempts to dictate in that way, and to say, that, in case it is not in a certain condition, a fixed rule of shrinkage shall be applied. I contend that the manufacturers injure their own interests by this course. The wool-growers have got so now, that they don't sell to the experienced agent: they leave the grease in, and wait till the raw buyer comes along. If they see a man whom they know to be a judge, they will hardly take the trouble to show him their wool; they are busy; they don't care whether he looks at it or not. Why? Because they have not fitted it to sell to him: they have washed it poorly. By and by, a man comes along who is buying wool on commission: he knows but little about it, and they sell their wool to him; and, if he makes two or three cents on a pound, he does better than the average in such cases. I say that I can next spring, if I choose (and no man can convince me of the contrary, because I have seen it for years), give my sheep a mere dip in the water, or drive them through the stream; and then, when the buyer asks me, "Is that washed wool?" look him in the face and say, "Yes, sir," and the trade is consummated. Whereas, here is another man who does not wash, but his wool has been exposed to the rains of heaven all the year round, while in the other case the sheep have been housed, so that the fleeces are fifty, sixty, or seventy-five per cent yolk: yet he must submit to the deduction. I think this has produced more irritation between the two classes than any other one thing. I have no doubt that this National Convention will recommend a different course; and, when that is done, it will remove one of the strongest causes of discontent. There are men all about, — some, perhaps, in this room; but thousands, I know, not in this room, to whom this is a constant source of irritation.

Dr. GEO. B. LORING, of Massachusetts. - I wish to make an inquiry; but, before doing so, I desire to say, that having lost the chance, through the ruling of the Chairman, to make the little reply which I was prepared to make to the gentleman from Vermont [Mr. Cutts]. I would simply state to those gentlemen present, who have not heard the discussion before, that that speech has been replied to once before by myself in New England, and several times by gentlemen from Vermont in the newspapers, — that identical speech. When I hear a son of Vermont assailing what has become, at last, one of the great interests of that State, I can only say, as Mr. Webster did, in concluding his great Dartmouth-College argument, when he paused, and, turning to the Supreme Bench, said, "This may be a light matter for you, gentlemen, but there are those of us who have an affection for that old place, and it may turn upon us, like Cæsar upon Brutus in the senate-house, Et tu quoque, mi fili, — 'And thou too, my son!'" This is from Vermont, and there we leave it.

Now we will come back to the question. I want to know if the manufacturers prefer to have the wool washed. Many of them have said to me that they did not like this practice of purchasing washed wool, but would prefer to have a rule adopted, by which all wool should be sold unwashed. I think a suggestion in regard to this matter might come from this meeting, that would be very useful, not only to wool producers, but to wool buyers, hereafter. Is there any special advantage to the manufacturer in purchasing washed wool?

Mr. N. Kingsbury, of Connecticut.—I can only answer the question for myself; and I will attempt to do so in the course of the remarks which I propose to make, which will be very brief. I have a few things which I would like to say, beginning with the one-third rule.

I must confess that I was not acquainted with the fact that there was

any dissatisfaction with the one-third rule, until within a short time, three months ago perhaps. As a manufacturer, purchasing wool for the last thirty years, I have made no arbitrary rule of that kind, nor practised upon any arbitrary rule of that kind. It has been our custom, when purchasing a lot of wool containing perhaps fifteen, twenty, or thirty thousand pounds, if there were a few fleeces unwashed, to throw them out in a pile, and for the producer to say, "I want you to take that little pile of one hundred or two hundred pounds of unwashed wool with the other." — "Very well; you may put it in;" and the suggestion has almost always come from the seller, "I will put it in at one-third less." I know not how a rule of this kind originated, nor do I know how extensively it has been practised. The Chairman has said that it is practised, and of course I do not doubt his word on that subject. If it originated with the manufacturer, I think it must have been in this wise. Many years ago, when it was customary for washed wool to shrink from thirty to thirty-three per cent, unwashed wool, at onethird off, would average about the same price as washed wool. That was a very fair statement of the difference between washed and unwashed wool. I am not aware, however, that any rule like this originated from that source. But I do know this, that, in purchasing wool of late years, the manufacturer's cry has been, "How much clean wool can I get?" I think that question is much more frequently put now, than it was a few years ago; because, when manufacturing commenced in this country, and we were struggling along, we did not keep our accounts as accurately as we keep them now. We did not go into all the details and statistics of the manufacturer as we do now. It has now become a complete system, to every detail of which we give great attention; so much so, that we are able to tell you, in many of our manufacturing establishments, precisely the shrinkage on every single lot of wool which we purchase, be it washed or unwashed. We are able to tell you precisely how much clean wool we get out of every lot we purchase during the year, and then we are able to go on and tell you precisely how much clean wool it has taken to make a yard of goods; and how much wool, as it was purchased, in its washed or unwashed state. All the details of the business are followed out very closely at the present time.

Now, I have often purchased unwashed wool, and I have always (except in the cases to which I have referred, where I have bought a little parcel of unwashed wool with a lot of washed wool) paid for that wool what it was worth, in my judgment. I have estimated in

my own mind the shrinkage of that wool, or the amount of clean wool it would produce, to see how much it was worth, compared with washed wool. I admit that at present there is a great difference in the shrinkage of what is called washed wool,—a very great difference from what there was twenty or twenty-five years ago. I know that some years our wool has shrunk not less than forty or forty-four and a half per cent, - making a proper allowance for the unwashed wool which may have been purchased, so as to bring it exactly in comparison with the other. If we were now to go into the purchase of unwashed wool, making, in all cases, a deduction of one-third, I admit that the unwashed wool would be cheaper than the washed wool. (When I speak of "washed wool," I speak of wool which is called "washed," but which really is not washed wool.) So far as I am concerned, I think I should be entirely satisfied to have all the wool of this country sheared in its unwashed state, and brought to market. I would like, however, to have some little improvement made in the manner of doing up the wool. I presume to say, that this intelligent body of wool-growers do not know - they certainly cannot know - the damage they do to every fleece of wool which they tie up with hemp twine. I tell you it is utterly impossible to manufacture a piece of indigo-blue cloth from wool which we purchase of you tied up in twine or in hemp string. We cannot do it without using another dye besides the indigo blue, and to cover up the imperfections occasioned by those strings. We cannot make a piece of bright, handsome, black broadcloth, out of wool tied up in your hemp strings. There should never be one particle of hemp string, or any other kind of string from which a fibre can come, put round a fleece of wool. It is ruinous, and will become even more and more so, as the manufacturers go more and more into the manufacture of fabrics of plain colors, which require an even, handsome finish.

A Delegate. — What would you suggest?

Mr. Kingsbury.—If tied up with any string, it should always be a woollen string, and the string should compare somewhat in fineness with the fineness of the wool.

Mr. POTTLE. — Will the manufacturers send us out such an article for that use? If you will manufacture it, and send it out, see if we don't send you our wool tied up with such strings.

Mr. Kingsbury. — Create the demand for it, and we will send you the strings.

Mr. POTTLE. - We create it now.

Mr. Kingsbury. — Say you will adopt them, and we will send you the strings; we can make them.

Mr. Pottle.—We pledge ourselves to use them, only we shall want you to discriminate between wool that is tied up with that kind of string, and wool that is tied up with hemp strings.

A DELEGATE. — In sacking the wool, would it not be necessary to use woollen sacking?

Mr. Kingsbury. — We receive damage from the sacking, as well as from the strings, but not to the same extent. I think we could get along with the fibres which come off of the hemp sacking, although we have considered a smooth cotton sacking much better than hemp sacking. In regard to the strings, I hope we shall, in a very few years, create a public sentiment so strong, that not a soul of you will be able to sell a fleece of wool tied up with hemp strings.

Then there is another thing which I want to say in regard to this matter of string. I believe there is a gentleman here who took off from one single fleece seven ounces of string! When we have sorted a lot of wool, we always find a great pile of string, for which we have paid from sixty-six up to seventy-five and eighty cents a pound. We are able to sell it for about three or four cents a pound, so that it is nearly a dead loss to us. In Germany, I believe no string is ever put on the wool. That is, I have never seen any wool imported from Germany that had strings round it.

Mr. Pottle.—I want to state the simple fact, that, for twenty years,—the length of time that I have had my eyes upon this business,—I have never known of any complaint, because of the kind of string we have used. The wool-growers have tied up their wool with these strings without knowing that there was any wish on the part of the manufacturers that they should use any thing else. I say this in justification of the wool-growers. As to the man who put seven ounces of string round a single fleece, of course I have nothing to say in his defence. He was simply a scoundrel.

Mr. Kingsbury.—I am not at all casting reflections upon the woolgrowers for putting hemp string on their wool. It has been the custom, and we have not felt the damage that it has been to us, until quite recently; and we have had no opportunity to state the facts to the wool-growers. This afternoon, they have asked us to make any suggestions that would be for our mutual advantage, in plain English, that all can understand; and therefore I am making them in that way. I have said nearly all I have to say upon the subject. I conceive it to

be one of the advantages of our coming together here, that we can talk over these matters, and that will have a tendency, of course, to rectify all these mistakes; and if we could come together and see each other every year, or once in two or three years, and talk over some of these subjects which we feel aggrieved about, I think great good would result. For instance, it has been said to us who are manufacturers, "You make most wretched work in the purchase of wool." Well, we are aware of that, gentlemen. You ask us why we don't send out competent men to purchase our wool. I will tell you. It is because we are not able to procure our wool in that way, as wool is now purchased in the United States of America. There is no country in the world, that I know of, where wool is purchased as it is here. How is it? Suppose, just after shearing, we start some competent man to go through the wool-growing States and purchase wool, — a man competent to judge of the value of washed and unwashed wool. What is the result? He goes out among you wool-growers and commences to buy, and at once you are surrounded by buyers. Every man in town is a wool purchaser. Every merchant is a buyer, and every man who has got a little wool wants to get a little more. The object is to speculate in wool, and the whole clip is swept off in two or three days, bought up by farmers, blacksmiths, shoemakers, merchants, and every class in the community; and the poor manufacturer, who sent his agent out there at considerable expense, has been able to pick up a few lots, that will afford hardly profit enough to pay expenses. We cannot purchase wool in that way, so long as everybody is to be a wool-buyer. We cannot afford to send out agents under such circumstances; and you must all know that this is the case, to a greater or less extent, in every place.

Mr. Pottle.—Is not the remedy in your own hands? If the manufacturers would at once say, "We won't buy these lots of wool, picked up by blacksmiths and blackguards and merchants,—these men of whom we know nothing,"—how long would they come into the market?

Mr. Kingsbury.—There you have got us. We cannot do it. Wo want wool; we must have wool. You don't produce any surplus, certainly. You only produce seventy per cent of what we want; and we must take the wool, whether well bought or poorly bought. Wool we must have, or the machinery of the country must stop. We are compelled to submit to a great many of these things, such as wool tied up with large strings, dirty wool, and greasy wool, because we must have the wool.

Mr. POTTLE.— There is not one man in a hundred who goes round picking up wool who is able to hold it thirty days. Now, if you say you will only take that wool at a lower price than was paid by these men, how long will this state of things continue?

Mr. Kingsbury. — Then competition comes in; somebody else will offer more than we do. It is a thing the manufacturer cannot regulate. We understand it; we know that the wool is not bought judiciously, or as we would like to have it bought; but it is bought as it is bought, and we cannot help it. All these things may be remedied by future action on the part of wool-growers and manufacturers.

I have already occupied more time than I ought, and I will make but one remark further; and that is, that, for one, I am rejoiced to find myself here face to face with the wool-growers of the country; and I rejoice to give to you, the wool-growers of the country, my pledge, that, in time to come, we, the manufacturers, will feel that our interests are mutual, and that we cannot sustain the one, without sustaining the other. The wool-grower and the wool manufacturer must go hand in hand; and, if we will thus go hand in hand, I believe we can procure such legislation as shall be necessary to protect your interests, and such legislation as shall be necessary to protect our interests; so that the great wool-growing and wool-manufacturing interests of the country, now larger perhaps than any other interests, shall go on in a state of prosperity beyond even our highest expectations, and we shall loom up before the world as a people unsurpassed in our manufacturing interests.

Mr. H. Blanchard, of Connecticut.—I rise with much diffidence to speak on this subject, because I see so many interests involved in this discussion, which it seems to me are so poorly comprehended by many of us, in their bearings each upon the other, that I cannot expect to elucidate the subject in such a manner as to give entire satisfaction to all the parties concerned.

I have had some experience in the matters under discussion, and perhaps can sympathize with the wool-growers; having been, from the position which I have occupied in years past, associated with them in a way that enables me fully to comprehend all their wants. I know the difficulties under which they labor; and it is this knowledge that has caused me, while listening to these debates, to rejoice from the bottom of my soul that this Manufacturers' Association is organized, and that this National Wool-Growers' Association is organized; that the information which it is necessary should be communicated by the

one to the other, may be made available for the practical benefit of those concerned. All this discussion in relation to the different breeds of sheep is interesting to us as manufacturers. Many of us can look back to the time when the efforts to improve the breed of sheep were commenced; and these discussions are not unprofitable, but will, undoubtedly, result in good. The remarks which the honorable Chairman has made, and the requests which he has made, were made in good faith; and yet, if we were a little captious, we might ask, "What obligations are we under to send agents to you to buy your wool?" No other business is conducted in this way. When we, as manufacturers, want to sell our products, we either do it in person, or we have an agent, who knows their value, and does not receive his estimate of their value from the man who proposes to buy them. You do not do so. Why not? It is in your power to do it. If you farmers would have a competent agent, who understood the condition of foreign markets and of your own product; who himself knew the relative value of wool, washed and unwashed; whose business it was to tell you what Mr. Kingsbury has told you, that, if you put hemp twine upon your fleeces, it is full of fibrous matter, which will be left in the wool when it is drawn through, and cannot be extracted, -he could have told you all this; and he would have been able to come to me and say, "Here is a lot of unwashed wool which I wish to sell you." - " Very well," I say, "what is your price?" He would not say, "The price of washed wool, a third off." If he was an intelligent man, he would know himself the value of that wool; and, if I wished to purchase, we should have no difficulty in getting at its market value, if there was a market value attached to it.

It is not my province to come here and advise you what to do. I only state these as some of the difficulties which exist. I believe that every intelligent manufacturer to-day makes his estimate, in purchasing wool, upon what he believes will be the net result, after scouring, in clean wool. If he errs in judgment, he will either fail in business or lose money,—that is all. I think enough has been said upon that subject, without occupying your time further upon it.

I will mention a difficulty that exists, to meet the objection that we manufacturers are not fair in our method of buying wool. I have travelled over the mountains of Washington County, Pennsylvania, a good many times, in company with a gentleman well acquainted with the farmers. I go to a gentleman who has raised a clip of wool; and, after examining it, I say to my agent, "There is a fine clip of wool; it

is, I believe, every thing that is desirable; you may pay sixty-two and a half cents a pound for it." I go to another lot, and I say, "The condition of this is bad; its quality is not what I want; it isn't worth more than fifty-five cents." Then I go to another lot, and I say, "This is worth fifty-seven cents."—"Ah!" says he, "if I pay one man sixty-two and a half cents a pound, I can't buy another clip of wool in that neighborhood without I pay the same price." Am I not right? Who will contradict that assertion, among you wool-growers? [A VOICE.—"That is true."] I only call your attention to this, to show you one difficulty under which the manufacturers labor, not to find fault with the wool-growers.

I don't think you can turn upon us, and say that we can correct all these difficulties that exist. I do not know any other way for the manufacturers to do than they have done. The laws of trade cannot be ignored by us: if we should attempt it, we should fail. Supply and demand regulate prices. Every business man will buy where he can buy the cheapest, and sell where he can sell the dearest. That is the principle, — the very principle which you act upon in your business transactions. In effecting our sales, we adopt such a system as in our judgment will make the closest discriminations as to values, as to demands, and as to the proper time to supply those demands.

Gentlemen have complained here about the amount of wool in the hands of the farmers. Is all the wool of the country worked up each year? Why should the manufacturers hold 200,000 pounds of wool, that is worth sixty or seventy cents a pound, and lose the interest on his money, when the grower can as well hold it until he wants it? There are two sides to this question. It is no object for us to buy a year's stock of wool in June, that is not to be worked up until the next May. I think, therefore, that gentlemen need not be discouraged if they have a stock of wool unsold on hand. The season has not closed; the new clip is not yet in.

I wish to say a word in reference to the remarks of our friend who has broached the one-third rule. We expect, usually, that a washed fleece which weighs three pounds will weigh about four and a half pounds unwashed; and if a man comes to us, and wants to sell a few fleeces of unwashed wool with a lot of washed, — you know how it is; they want to sell the whole lot together, — we say, "Put it in, and take off one-third:" but I presume there is not a manufacturer in this house who goes into the market to buy three or four thousand pounds

of unwashed wool, who does not exercise all the powers that he possesses in deciding what the shrinkage will be. The one-third rule has no influence at all upon his estimate; he decides the question upon its If you prefer to put your wool into the market in an unwashed state, I don't suppose many of the manufacturers would object. But I think if you tried the experiment of taking one neighborhood, and let them wash their sheep well, - that is, in a clear, running stream, — and then, after they are properly washed, let them run a week before they are sheared, leave out the tag-locks, and put the wool up properly, according to the custom of the country, - putting in every thing that is clean and is wool, - and then let another neighborhood put up all their wool unwashed; and, if you had a mathematical demonstration which would so solve the problem as to enable us to tell exactly the relative value of the two lots, nine manufacturers out of ten would take the washed wool rather than the unwashed. Some might take the unwashed; but, every thing else being equal, the great majority would take the washed instead of the unwashed.

You may ask my reasons for this opinion. Our honorable friend, the President, has said that wool will keep better in the grease; but that reason is not relevant in this country, where we have no surplus to be kept for any length of time. The custom has been, in this country, to wash our wool; and that is the custom to which our manufacturers have become habituated. Well, we all know that the customs of a country cannot be changed by the resolutions of a Convention: it requires something more than that. Yet, if it should be found, upon trial, that it is beneficial to have the wool brought to market unwashed, I presume the manufacturers would make no serious objection. There may be cases in which it may not be expedient to wash high-blooded sheep; perhaps it might not be advisable to wash imported sheep, under peculiar circumstances. I presume no objection would be made to receiving washed wool from the rolling country of the Western States, where the climate is such that the streams are warm early in the season, and the sheep can be washed early.

I express these opinions for myself only. I think the wool-growers would find a more ready sale for their wool if it was well washed, and put up in good condition. The difficulty in selling wool has no bearing upon this question whatever. If you will take some measures by which your wool can be intelligently brought to the manufacturers, you will have no difficulty in getting the full relative value for your product. Take Ohio, the largest wool-growing State in the Union. Two-thirds

of the clip are bought up by the country merchants. The manufacturers cannot help that. We are not responsible for that. The country merchant thinks he is a very good judge of wool; he thinks he understands how much wool ought to shrink, and what its relative value is; and, as he approaches the farmer to buy from him his clip, understanding his peculiarities, and calling into exercise all the shrewdness of which he is capable in making a bargain, he pulls on just such a string as he thinks will be most effectual in order to induce him to sell that clip at the lowest price. Is not that so? I think you will agree with me that it is so. Now, what can the manufacturers do to correct such an evil as that? The merchant gets ten or fifteen thousand pounds of wool collected in his loft. Some of the manufacturers go out into the country, and they find this lot of wool on hand. They want the wool. — they are out in the country to buy wool, — and they buy it; the merchant charging them, perhaps, two or three cents a pound more than they could have got it for from the producer. The merchant leaves the impression on the mind of the wool-growers, that the objections which he brings against their wool are brought by the manufacturer. I suppose that none of you need be told, that to be qualified to judge accurately in regard to the relative value of wool requires a little more experience than is derived from dealing in it for four or five weeks in a year, and simply examining the outside of a fleece. I think the manufacturers are not responsible for the manner in which your wool is sold in the country. I cannot take any blame to myself; I think the onus is on you. But if you can, in your individual capacity, or in your collective capacity as an Association, devise some way by which your wool can be intelligently brought to the manufacturers of this country, all these difficulties which have been described here will be removed.

Now let us look at the course pursued in other countries. Is there any other nation in the world that sells wool as we sell it? Take Germany, for instance. There the skirts are taken off the fleeces, two or three are laid together, and they are rolled up in one parcel, with perhaps a single string round them, and perhaps none. If there is a string, it is a twine of hemp that is made smooth and glazed, so that the fibres, when it is drawn out, shall not be left in the wool. There is no objection to such a string, and in that condition there is a value to be attached to that wool, as washed wool. We go into the market and buy foreign wools, and make our estimate of the shrinkage. We buy American wools, and estimate the shrinkage. The millions of

pounds of wool coming from Texas is unwashed; but there is no difficulty in getting at the value of it. It is just as good as Vermont wool; but the facilities for washing are so poor that they are not able to wash it. The one-third rule does not prevail in regard to it. In short, I may say that there is no one-third rule which has been established by the manufacturers. If any exists, it has been established more by the local buyers than by any other class of purchasers. I have often seen unwashed wool that I would not take at forty or even fifty per cent discount, while I have seen other lots which at twenty or twenty-five per cent discount would be very cheap. There is no other principle of action, as I have already said, by which manufacturers are governed, than this, "What percentage of wool can I get from that lot?" and, when that is decided, we regulate the price.

Mr. H. Cutts, of Vermont. — I wish to be indulged in making a short statement in answer to the remarks made by the gentleman from Massachusetts [Dr. Loring]; and, in that statement, I think I shall be borne out by more than one gentleman here present. The gentleman says that he has replied to the speech I made once before. I deny that he has ever answered any speech that I have made anywhere in this world, and I can produce witnesses to bear me out in this statement. The only color of support that he has for this statement is this. one occasion at Concord, N.H., he came out with a similar speech to that which he has made to-day, and, with the same dictatorial manner, undertook to prescribe to breeders what breed of sheep they should raise. I answered that speech then as I have answered a similar speech to-day. If my speech appears to him to be the same as that I made at Concord, it is because I was answering a similar speech made by him. I don't know that I have ever made a similar speech anywhere else.

I must say one word more, in answer to the imputation the gentleman puts on me of being unpatriotic; that is, of not being a true and faithful son of Vermont, in saying what I have said. "Et tu, Brute," he says. How is it? I accorded honor to these men for all the improvements they had made, both here and at Concord, on the former occasion to which I have alluded. All I object to is, that he should undertake, as the champion of a particular breed, to say that that is the only breed to be raised, and that no one else shall say there can be any improvement upon it. He sets that up as the golden calf that must be worshipped; and, if any man don't worship that golden calf, he is declared to be unpatriotic to Vermont, where he sets it up. That is

the way I understand it. Now, I have yet to learn, that, great as has been the improvement made upon merinoes in Vermont, all men must sit down and fold their hands, and say there can be no further improvement, and, if any man presumes to doubt that statement, he is to be denounced as unpatriotic. I claim to be as patriotic as that gentleman, or any other; and I claim that my statement is true in regard to this,—that that gentleman has never answered any speech of mine.

Dr. LORING. — This matter of packing wool has been one of very great interest to me, as a practical matter. How to get at it, is the question. What we want is a uniform price for wool, if we can find it. Now, shall we get that by having a part of our fleeces washed, and a part unwashed; a part tied with strings, and a part not? or shall we endeavor to create some temptation to those who are growing wool here, to present their wool properly in the market? Perhaps the German method of tying with glazed twine might answer. Might not wool be packed in cotton bagging, or something of that sort?

Mr. Blanchard. — One suggestion occurs to me. If I wished to manufacture a piece of broadcloth with a brilliant lustre, and give it no other color except that which was embodied in the wool itself, I would wish to have it free from any foreign substance. If I wished to pack in linen sacking, and in the most perfect manner, I would scorch the sacking, so as to take off the little fibres on the inside. Or, if it was very fine wool, I would take sacking that had been used, and the fibres worn off, and then I think the manufacturer would find very little difficulty. But, if you would pack it in the most perfect way, you would either pack it in cotton, where there would be no fibres to rub off, or in linen sacking, scorched in the way I have suggested.

Then, in regard to the string. I suppose all the string that is necessary is just enough to keep the fleece together. A very small twine, just strong enough for that purpose, is all that is needed. Every gentleman can use his own judgment. There is an abundance of this kind of twine in the market. I can buy twine for sixty-five or seventy cents a pound, that the manufacturer never would complain of; but I can't buy it for twenty or sixteen cents a pound. Instead of weighing three or four ounces, all the twine necessary would not weigh more than the tenth of an ounce. So far as fancy cassimeres are concerned, and the great bulk of the woollen productions of the country, there is no objection to packing the wool in the ordinary wool-sacks, as it now

comes to market. There would be no objection to ninety-nine one hundredths of the wool that is manufactured to-day, on account of the sacks in which it is placed. I was speaking only of the extreme cases.

Dr. Loring. — Now I want to ask another question. Suppose it was known that the whole clip of wool in the United States was unwashed, I want to ask the manufacturers whether they would not consider that they could go into the market and purchase that wool with more chance of forming a correct judgment in regard to its value, than they now do, knowing the various methods of washing that are pursued, and buying part of their wool washed and part unwashed.

Mr. BLANCHARD. - Another remark is necessary in replying to that question. The judgment of men accustomed to discriminate between the different qualities of wool in this country has been formed on washed wool, as a general thing. A new exercise of judgment would be required with unwashed wool; for, so far as my observation goes, and I think I can find those present who will agree with me, - fleeces in the unwashed state appear, in their size and fibre, different from washed fleeces. Hence you must educate the judges of wool — so far as American wool is concerned - to decide upon a different scale from the present. I do not say that cannot be done. Of course, if all the wool of the United States was unwashed, they would know what its value was no better than now. Every wool-grower might shear his clip unwashed; and there would be just as much difference in the value of their wool, unwashed, as to condition, as there is now. don't think the purchaser could get at its value any better than now.

Dr. Loring. — The statement has been made here, in regard to this one-third shrinkage rule, that it is not universal. One gentleman remarked that it is rather a local matter. Here is the monthly special report of the wool market of Chicago; and underneath it says (which would seem to bear out that statement), "One-third off for all buck fleeces unwashed, and ill-conditioned wool." Now, that is not a general test, applied to all the wools brought in the Chicago market: it is merely applied to unwashed wool and buck fleeces, which are considered, I suppose, to vary in value from other wool in that proportion. Now, if this is the case, — if this is merely a local matter, — cannot something be done to establish a rule which will prevent the introduction of such fleeces into the market?

Mr. Blanchard. — No rule can be adopted but an actual test. If a hundred bales come to me that weigh two hundred pounds a piece,

and whoever purchases them of me throws out three or four bales of unwashed wool (which is no unusual thing), and I find that those three or four bales weigh three hundred pounds a piece, I should say that the one-third rule was near enough for all practical purposes, on so small a quantity. But, if I was buying twenty or even ten thousand pounds, I should want a closer discrimination than that.

Dr. Loring.—I have listened to this discussion with great interest. Very many suggestions have been made, that will be of value to woolgrowers, if they will only heed them. I find that it is an almost interminable subject. The manufacturers differ, and the wool-growers differ, in regard to it; and now I move, as the sense of this Convention, that the National Association of Wool Manufacturers be requested to appoint a committee of three from their body, to unite with a similar committee to be appointed by the National Wool-Growers' Association, to investigate this matter of the one-third shrinkage rule, and report at some subsequent meeting; and that the Chairman of these two organizations be requested to make the nominations.

This motion was carried, and the Convention adjourned to seven o'clock, P.M.

EVENING SESSION.

The Convention was called to order shortly after seven o'clock by the Chairman.

Mr. R. G. HAZARD, of Rhode Island. — Mr. President, — In the course of the discussion, in regard to washed and unwashed wool, a question which I think very pertinent was asked by a gentleman on the other side, and answered in part by my friend, Mr. Blanchard. It was, whether there would be greater or less difficulty in judging of wool in the unwashed condition, than there is in the washed. There is, however, I think, Mr. President, one element in that question which has not been introduced, and which would go to increase the difficulty of judging of the unwashed wool: a small error in judgment will make a great difference. I will endeavor to illustrate it by taking two extreme cases. Suppose, in the first place, that a manufacturer is buying a lot of wool, say a hundred pounds, which is very clean. He estimates that it will waste not more than five per cent. He pays ninety-five cents a pound for the lot, and estimates that the wool costs him, allowing five per cent for waste, a dollar a pound. Suppose he errs

five per cent in his judgment, and that, instead of wasting five per He then gets ninety pounds of wool for his cent, it wastes ten. ninety-five, which, instead of a dollar a pound, will be a dollar and something over five cents. A difference of five per cent, in his judgment, has made a difference of between five and six per cent only in the cost of his wool. Now, take the other extreme. We will suppose that he buys a lot of wool, of which he estimates that the waste will be ninety per cent, and for that he pays ten cents a pound. He has then, he thinks, ten pounds of clean wool, costing him ten dollars, which will also be a dollar a pound. Now, suppose he errs in judgment five per cent in this case, and that, instead of wasting ninety, it wastes ninetyfive per cent; then he has only five pounds of wool for his ten dollars. - making it cost two dollars a pound. In the one case, he suffers a loss of less than six cents per pound on it; and, in the other, of a dollar a pound. I present these as extreme cases, merely to illustrate the point. I don't present it as conclusive, by any means; but merely as one element to be taken into account, when that change is made.

I was also asked, by the President, for my opinion upon this point: whether it would be better that all the wool should come into the market washed or unwashed. As an abstract question, I think it would stand a little differently from the practical question which we have to meet. The practical question is, whether we would prefer to have the wool come into the market with no pretence that it has been washed, or have it come into the market called washed, but in reality differing very little from unwashed wool; and, upon that question, I have no hesitation in saying, that, for one, I would prefer to have it come in unwashed. The difficulty in judging of it, I think, would hardly be greater; the variety, certainly, would not be greater, if all came in unwashed, than now, when it comes in partly washed and partly unwashed, with all the grades, from well washed, down to merely running the sheep through a brook.

But, independently of this question, I still think, upon the abstract question, I should prefer to have the wool come into market in an unwashed state; and I will mention some reasons for this preference. One is, that I believe wool keeps in better condition, and works better, when we receive it in that state; and one reason of that is probably this. It is a fact familiar, I believe, to nearly all manufacturers, that if you take a fleece of wool, as we receive it at the mill, and immediately throw it into water, it is very difficult to scour that wool clean. There is some peculiar effect produced upon it by throwing it into cold

water, which makes it extremely difficult to get it into a proper condition to work afterwards. I don't know whether other manufacturers have noticed this fact; but that has been my experience, and I think I can see a reason why it is so. It is that the yolk of the wool will make, to some extent, a scouring liquor, which will mix with the oil of the wool. I have had wools from which I have made a liquor which would not only scour themselves, but other wools in addition. Some African wools will do that. It is reasonable to suppose, that if a fleece is merely wet with cold water, and then given to the manufacturer, we should encounter the same difficulty. I admit, sir, that in practice we do not usually encounter it; for I believe the farmers are very careful to provide, that we shall not, by suffering their sheep to run long enough after they are washed before shearing, to get the wool back into its natural condition. Thanks to them for that!

I think, Mr. President, there is a reason for adopting some rule in regard to the relative value of washed and unwashed wool. I do not say the one-third rule is the proper one. I think the proportion has varied from what it was when we got a part of the wool really washed and the other part unwashed, though I do not think the difference is so great as the gentleman [Mr. Blanchard] supposes, because I think that the change in the method of breeding sheep has caused as much gain to unwashed wool, in proportion, as wools have lost by being washed. It has already been sufficiently explained, that, when wool comes to market, the one-third rule practically has no effect. If the whole lot is unwashed, a price is put upon it according to its merits, without any reference to what it would be if washed. But when, as is generally the case, much the larger portion is washed and only a small portion unwashed, it is found convenient to have some standard as an approximation to what the unwashed wool is worth, as compared with the other; inasmuch as, the bulk of the wool being washed, the price will be fixed upon that. But in such a case, if the unwashed wool amounts to any considerable portion of the value, I think almost every purchaser examines that as much as the other, and exercises his judgment on the question whether it is worth more or less than the onethird difference; and, as he considers it worth more or less, the amount is added, or taken off. But there are cases in which it is important to have a rule for that purpose, as near as may be to the actual condition of things; and yet it is not very important to have it exact. A man, for instance, looks at 100,000 pounds, perhaps a part of it only exposed to view. He has no opportunity of seeing whether there is or is not

will feel dry and a little harsh and brittle, while the other man's will have a softer and finer feeling. The result is, that the man who has put up his wool well, really has contributed to the price paid to the one who has put up his wool badly. In that way, the man who puts up his wool in good condition fails to get a fair price for his product, and the other man gets an advantage to which he is not entitled. I think this has a demoralizing tendency in all cases.

Mr. R. M. Montgomery, of Ohio.—If this Convention will be patient with me a few moments, I flatter myself I can put this thing in a better shape than it is at the present time. I don't know that I shall succeed; but I hope I may.

I wish to congratulate my fellow wool-growers, in the first place, that this discussion has brought out one thing which I was glad to hear, and which will give us at least one advantage when we go home. It is this. We have been selling our unwashed wools to the buyers in the Western country, who have told us that the manufacturers required that this difference of one-third should be made between washed and unwashed wool. The manufacturers tell us now that that is not the rule. Next year, when we sell our wool to them, and they tell us that the Eastern buyers insist on taking off one-third on unwashed wool, we can say to them, "Gentlemen, the Eastern buyers require no such thing,—you scoundrels! You take the wool from my neighbors' old ram, and sell it honestly to those Eastern men for unwashed wool; and you buy my wool, that is washed by the rains of heaven better than one-half the wool that is sold in the market, taking one-third off, and sell it to them with three-thirds on."

I am authorized to say, for the men of Ohio, that we do not complain because of the amount of the reduction, but we complain of the uniformity of the rule; that all wool that a man is honest enough to say is unwashed must be reduced one-third, while another lot, equally dirty, if called washed, comes in without any reduction. What we complain of is, the making of this wool, which is called washed wool, the standard by which we must suffer in the sale of our wool, if we choose to sell it in an unwashed condition. We understand the manufacturers very well. We understand that they buy it according to its value, without reference to the rule. But we object to the rule imposed upon us of an indiscriminate reduction, whether it is in one condition or another, if it goes by the name of unwashed wool.

Perhaps I shall explain it better by an illustration than in any other way. Two or three years ago (the precise time is not material), my

wool did not come into market until late in the season. I did not ask any price for it; but one day there came along a man who has bought all the wool in our neighborhood for a good many years, and he said to me, "I would like to buy your wool; I can give you just seventy-five cents a pound for it."—" Very well, I can take seventy-five cents." will say that my wool was tolerably well washed that year; not so well as it used to be, because circumstances have changed. I have a neighbor, whose boy told me that two men washed five hundred of his sheep in one afternoon, and might just as well have washed a thousand; and not only that, but it was six weeks before they were sheared. I asked this buyer, "Did you buy Mr. --- 's wool?" -- "Yes." -- "What did you give him, -- seventy-five cents?" -- "Yes." This man, who has bought perhaps five hundred thousand pounds of wool a year in my neighborhood, could tell me that he gave this man precisely the same for his half-washed wool that he gave me for mine, which was tolerably well washed! I had some unwashed wool, which was as good as that man's half-washed wool; but he deducted one third on that.

Now, we would like to sell our wool for what it is worth, without reference to what another man sells his for. I think I have said enough on that point. It is needless for any honest wool-grower to say that he deprecates this as much as the manufacturers. It is only one of the many practices by which those of us who are tolerably honest are made to pay for the dishonesty of others. We ask the manufacturers to make a discrimination, and give us what our clean and well-put-up wool is worth, and not make us suffer for the misdemeanors of our neighbors.

It has been asked why we wish to sell our wool in an unwashed condition. One reason is, that we don't want to subject our sheep to the labor of carrying ten or twenty pounds of wool, soaked with water, as it will be if they are washed any thing like well for a week, more or less, until it gets dry. We don't choose to dress them in wet clothes for that length of time. Another reason is, we want to shear our sheep early; and, if we undertake to wash them, we cannot do it, for the water is too cold, both for the sheep and the men, early in the season. A great many men in our Western country cannot go into the water. One is subject to rheumatism, another to ague. A great proportion of our men are foreigners, raw men, not capable of handling sheep skilfully; and then the cost of getting it done is more than the increased cost of getting it to market, with the dirt still in the fleeces.

Mr. W. F. Greer, of Ohio. — Permit me to call your attention to one fact, which seems to have escaped you; and that is, the objection

with which the one-third rule is met in our own State. And I may be permitted to remark, that the facts which have been stated here with regard to this rule are of great importance, and would give a value to this Convention, if nothing else were accomplished. It has been remarked by one of the speakers, that the fact that the growers object to this rule was unknown to him until quite recently. Now, sir, this matter has been discussed in our State Association for four years; in fact, it was the cause of the formation of the "Wool-Growers' Association" in our State. What we object to is the standard by which the value of our unwashed wool is fixed. If the manufacturers will, in determining its value, estimate it upon the basis of scoured wool, we will not object. But the standard of washed wool is so uncertain, that it is not a very safe one to base an estimate upon.

Mr. E. B. POTTLE, of New York. — There is one question which I wish to ask my friend [Mr. Montgomery] in connection with the subject he has been discussing. It has been asked whether the growers prefer to sell their wool washed or unwashed. I say I should prefer to sell it unwashed; and the first and obvious reason is, that it is a cruel thing to wash sheep. No matter how careful the man may be in driving the sheep to be washed, they will get heated; and then, when they are in the pen, the very nature of the animal is such, that, before you can catch half a dozen, they are in a perfect state of fermentation from heat and fright. They are taken and soused into a trough or brook; and it is like taking them from fever heat, and putting them directly into the coldest water. I have seen the injurious results following from washing in my sheep for a week afterwards; and I have been obliged to put them into my warmest stable, and keep them there ten or twelve hours, until they were brought into a state of perspiration, to counteract the effect of the sudden change to which they had been subjected.

The second reason is, that it is wrong to require hired men to go into a brook, and stand all day for the purpose of washing the sheep. Now and then, a man will protest against it, and refuse to do it; but, as a general thing, they submit to it, because they labor for us, and are bound to obey our orders. It is an unhealthy practice; and many a man, now a hobbling cripple, may date his misfortune back to the time when he went into the brook to wash sheep, when it was cold enough to chill a man clear through. That has been the custom; but I think we are intelligent enough now to correct that practice. We ought to put our wool into the hands of the manufacturer, without subjecting either man or beast to the inhumanity to which this custom of washing has given rise.

Now, I put the question to my friend, Does your experience concur with mine on this point?

Mr. Montgomery. — My experience fully concurs with yours; and I may add, that frequently I have seen very injurious effects from washing. I think-the universal testimony of my neighbors is, that the sheep do not gain, but lose, all the time from the day they are washed until they are shorn, as a usual thing. But I say to you, sir, that I apprehend these wool manufacturers will very readily understand the cruelty that this custom engenders to the sheep, and the injury it does to men who will handle sheep carefully, and they will accept our explanation without much question. It is only our reckless, careless, devil-may-care farmers who will tell us it don't hurt the sheep. They don't pay any attention to it, and don't know whether it hurts them or not.

Mr. POTTLE. — There is another fact that should be mentioned in connection with this matter; and that is, the way sheep are handled when they are washed. The man who owns the sheep don't go into the water and wash them. You cannot get a gentleman (I use the term, of course, in its social sense) to wash sheep. The work is intrusted to Irishmen and Dutchmen; and no matter how careful you may be in instructing them, they will catch the sheep and handle them as they would sticks of wood. Sometimes, when a sheep has died in consequence of this rough handling, I have taken the pains to have it skinned, and shown the carcase to them, to let them see the effects of their treatment. When a sheep has been caught up by the wool, and held so that its whole weight is sustained by the wool, and thrown into the creek in that way, if you will kill it and skin it half an hour afterwards, you will find a space of from six to twelve inches from which the skin has been entirely raised from the carcase, and that the blood has settled there until it is as black as your hat. Inhumanity like this ought to be stopped.

Mr. Montgomert.—I want to say one thing more; and, having said that, I will detain you no longer. We, as wool-growers,—and especially in Ohio,—have asked whether there was any advantage in having the wool brook-washed, except for the matter of convenience in transporting; and we have asked different questions in reference to this subject, part of which we asked really for information, and part of which we asked, hoping that the answer, having authority as coming from the manufacturers, would give us an argument against the gentlemen who buy our wool of us. At least, that was one object that in-

fluenced me. If we learn from you manufacturers that you don't object to the wool in an unwashed state,—that it is no damage to the wool,—we then have an argument which we can use, when we go home, to those who buy wool. We have your authority for saying there is no benefit in washing the wool, and it gives us some advantage in carrying out the practice of not washing among ourselves.

The President (Mr. E. B. Bigelow, of Massachusetts, in the chair).—It is quite a custom among producers to put tag-wool into their fleeces, as they put them up. Before washing,—say about the first of May, when the sheep are first turned out to grass,—they are tagged; and, in tying up the fleeces, a handful of this tag-wool is put into each fleece. One of the manufacturers at the New-York meeting asked my opinion of that practice. I told him, and I wish to express that opinion here again to my brother producers. It is a fraud. We have a right, under the custom of this country, to put all the wool that is clean into the fleece. But if we sell our wool washed, and if the tags are cut off before washing, we are bound to put those tags into a tub, and wash them as well as the wool is washed, before we put them into the fleece.

Mr. POTTLE. - Will the gentleman allow me to make one statement? My practice has been - and it is the usual practice of men who mean to be honest -to throw the tags into a pail, and give them as thorough a washing as the fleece gets, and then roll them up inside the fleece. I discontinued that practice, because I became satisfied. first, from looking at the tags after they were washed, and, second, by consulting two or three eminent manufacturers (and I want to see whether the testimony of these gentlemen concurs with theirs), that the process of washing destroyed the value of the wool; and I will tell you why. Before these tags are washed, you can separate the good wool from the poor, and what there is left will be worth something. The result of washing is, that they are all felted together, and you cannot get them apart. Several manufacturers have told me they would rather have them separate than have them mixed up together, the pure with the impure. Hence I have adopted the practice ever since, of putting the tags in one corner of my wool-house, unwashed, insisting upon the condition, when the buyer came round, that they should be taken with the fleeces, according to the general custom.

Mr. RANDALL.—I had proposed to suggest that same course. If the sheep have been allowed to run to grass, and the tags have become stained by dung, there is no doubt the course mentioned by Mr. Pottle is the only proper one. The point I make, however, is, that putting unwashed wool into a washed fleece is fraud, and it would be so declared by a jury.

Another question asked me was with regard to putting in dead wool. Every farmer who has any considerable number of sheep will have three or four, or half a dozen, die during the winter. It has been the custom to treat their wool like the tags. I think this is a most unqualified fraud. I don't want to use any milder term than that. The man who puts a bit of dead wool into the middle of a fleece commits the same crime in principle, although it is not the same in effect, as he who puts a stone there. Some men put stones in; but I think our people ought to abandon the practice of putting even dead wool in!

This matter of tying up wool is another thing to which I wish to refer. It is a disgraceful thing for any wool-producer to have a single fleece of his all twisted up with twine. We do up our fleeces differently from what they do in Germany. By the custom of this country, you have a right to use three strands of moderate-sized twine round the wool; and then, if it bulges out considerably, it is a very common practice to put another round the other way. I do not see any objection to this, so long as the twine is visible. I don't believe there is any man within the sound of my voice, —indeed, I know there is not, —who does these objectionable things; but I think those of us who claim to be representative men in sheep-matters ought to despise the men who do such things, and teach others to despise them.

I am glad Mr. Kingsbury told us what kind of twine to use. We cannot use very small twine in tying up these large fleeces. The reason is, that no man's hands can stand it. You must have twine large enough to be drawn with some strength; and with the twine we now use, a man has to wear gloves, and, even then, the hardest and horniest hand gets sore in doing up fleeces one day. I want to know if there would be any objection to using common-sized twine, put three times round the fleece. If it is put round only twice, the fleece bulges, throws off the twine, and the fleece breaks to pieces. It is necessary, therefore, in order to keep the fleece in a compact form, to put the twine three times round. That makes seven or eight feet of twine. But there it is; you know what it is; and there can be no objection to it, if it is done in a workmanlike manner. It is under your eyes, and you can make such a deduction for it as you please.

Mr. H. BLANCHARD, of Connecticut. — So far as I am concerned, I think the chief cause of complaint is the large twine that has been

used, more particularly for the last three or four years, made from a kind of jute. In many cases, that is full of fibrous particles, which are constantly coming off into the wool. There is a kind of twine that was used fifteen years ago in putting up our best fleeces, that is perhaps about two-thirds the size of a pipe-stem, — a smooth, glazed twine, which has no fibres to come off into the wool. I have never heard a manufacturer complain of wool tied up with twine of that kind, put three times round. But when tobacco twine is substituted for that, — and that is used now about as much for tying up wool as tobacco, — the evil is so apparent, that I think the wool-growers must see the force of the objection to it.

Mr. RANDALL. — If you can tell us where we can buy the twine you describe, we will get it and use it.

Mr. BLANCHARD. — We buy it every day almost.

Mr. Randall. — I am ashamed to say, that I had my wool tied up this year with the twine to which the gentleman objects; but it was because I could get no other. I went myself into every grocery and every store in my town, where I thought it possible to get twine; and I could find nothing but that rough, miserable stuff, made out of jute, I suppose, which had slivers of the bark projecting from it; and, when you draw it, you draw off those slivers into the wool, and either they have all got to be picked out, or the cloth will be injured in point of color.

Mr. N. KINGSBURY, of Connecticut. — I still retain my idea, that no string should be put on but a woollen string. It is very apparent to the manufacturers of this country, that we are going to produce a different kind of goods from fancy cassimeres. Several mills are now working on goods which require a very fine face, and I am fearful this same difficulty will occur. My own opinion is, that woollen twine can be produced, if it will be used by the producers. There are mills enough, and they might as well go to work to make twine to tie up wool as any thing else. Two pounds of woollen string, in my opinion, would tie up a thousand fleeces. [Voices. — "Oh, no!"] You must bear in mind that wool string is only about half as heavy as hemp string, no matter how much you glaze the hemp string. But suppose it took four pounds to tie up a thousand fleeces. The wool would weigh, in an unwashed state, six or seven thousand pounds; washed, perhaps four thousand pounds. You will easily see that the expense of tying up your wool with woollen strings would be tritling, and this difficulty would be entirely removed, at a very small expense.

might cost somewhere in the neighborhood of \$1.75 a pound. Your four pounds would cost you \$7.00. The manufacturer would buy it back at the same price which he pays for the wool; and the extra expense, over and above what the wool-grower would get back, would be very small. It would be reduced to the very smallest fraction of a penny per pound.

Mr. Blanchard.—I must take the liberty to differ from my friend in his estimate as to the quantity of woollen string that would be required, and also to the feasibility of carrying out his plan. I have had some acquaintance with the wool-growers of eleven different States, I may say; for I have received wool from that number of States, and handled it. I think we are not sufficiently advanced in this country to put into the hands of the wool-growers of the different States which now produce this wool, the material he speaks of. We can put into their hands, or they can obtain that kind of twine that has been formerly used; and I think, if we should attempt the plan he suggests, we should fail to carry it out. I think we ought not to sanction the trial of any impracticable measure; for it would be adopted by only a few men, and the object would not be attained at all.

Mr. Pottle.—I want to pledge the wool-growers upon a single point; and I know I am safe in making the pledge. We, with our friends the manufacturers, hold to the great law of demand and supply, which leads a man to sell where he can get the most, and buy where he can buy the cheapest. That law will regulate this whole matter of string. Now, what I want to say is, that the wool-growers will tie up their wool in such a way as you will make it for their interest to tie it up,—in the way that will bring them the greatest number of dollars and cents when they come to sell it. All theories outside of that will fail.

Mr. Blanchard.—Allow me to say, in reply to that, that I think the gentleman, if he went through Nebraska or Iowa or Wisconsin or Illinois or Indiana, would meet with considerable difficulty in finding any class of men who would adopt a system that would be so difficult to carry out as that proposed by my friend, Mr. Kingsbury; and, when their wools come into market, they become, of necessity, mixed up with wools that that gentleman [Mr. Pottle] sells; and how is the manufacturer to discriminate, and pay him for his wool a suitable advance on the price of the other? I understand his argument is based upon the fact that the manufacturer is to go to the wool-grower to buy his clip.

Mr. Pottle. — No, sir. Just say to the wool-broker, when he comes up with his wool, "Here is a lot of wool done up with tobacco string; I shall deduct two cents a pound on that wool," and I will guarantee that the wool won't be tied up in that way next year. Away up in Nebraska and Iowa, they will have that kind of string which will enable them to get the most money for their wool.

Mr. BLANCHARD. — To my mind, the plan does not seem practicable.

Mr. R. G. HAZARD, of Rhode Island. — I am afraid, that, until we have some practical method of giving the wool-producers pay for these strings, we shall never meet the difficulty. I think it comes back to this: Determine what is the best mode, and, if a respectable number of wool-growers adopt it, in the nature of things they will get paid for it. They will get as much more for their wool as it is worth; and, if it is worth more than enough to pay for the additional cost of the strings, there will be an advantage to those who adopt the practice.

Mr. W. F. Greer, of Ohio. —I can bear witness to the fact, that there has never been a moment in our market when a man who chose to buy a good string, of the character described, and was willing to pay thirty-five or forty cents a pound for it, could not get it. I have used that kind of string myself for some years. I was led to do so from selfish motives, not knowing that the manufacturers objected to the cheap string. I tie up my own wool, and I have suffered from sore fingers in consequence of it; and any gentleman who thinks any thing of his fingers would be perfectly willing to pay the extra expense necessary to procure a better article of twine. But still the large quantity that is bought in our neighborhood is sold for eighteen cents a pound; and, with wool at a dollar a pound, it affords a very handsome profit.

The matter of washing tags is another subject that has been brought to our attention. I wish to confirm the remarks of my friend, Mr. Pottle, upon that subject. It was formerly the custom with our people to wash their tags in tubs, and extract all the filth they could, so that they were absolutely as clean as it was possible to make them by cold water. But, during the last two years, acting upon the advice of our principal buyers, they have changed the practice; and it is now the uniform custom to put the tags in the wool as they come from the sheep, unwashed. This has been done in accordance with the wish and at the request of the wool-growers. I think Mr. Pope can speak more advisedly in regard to the northern part of Ohio: but I believe the

custom is becoming more and more prevalent in our State; and, if there is any fraud or error in it, the regular buyers are the persons who are censurable for bringing it about.

Mr. George W. Bond, of Massachusetts.—I wish to say, in addition to what the gentleman has just stated with regard to this practice which has obtained of late of putting dirty tags and dead wool into the fleeces, that when wool comes to market, and is offered for sale, if they are found rolled up in the fleeces, it is regarded as a fraud, and the buyer is considered entitled to an allowance for any such foreign matter thus rolled up in the fleeces, and frequently a great deal of trouble arises from that cause.

I think Mr. Montgomery must have misunderstood the remarks of the gentleman who spoke with regard to the one-third discount. Mr. Kingsbury, to my surprise, did say, that he was not aware that there was any such fixed custom as that of deducting one-third on unwashed wool.

Mr. Kingsbury.—No, sir: I said I was not aware of any arbitrary rule of that kind.

Mr. Bond. — Well, up to within eight or ten years, the custom in our market was to deduct twenty-five per cent; but, to conform to all the other markets, I should say it had been the invariable custom, for ten years past, to deduct one-third. It was not necessary for a person to ask the question what allowance was made on unwashed wool. Unless there was a special stipulation for a different allowance, the party purchasing a lot of fleece wool was entitled to one-third discount on the unwashed fleeces.

Mr. Blanchard. — You refer to the unwashed fleeces in a lot of washed wool?

Mr. Bond. — Yes, sir. An entire lot of unwashed fleeces was sold according to its merit. But I should say, that, in a majority of cases, the manufacturer would prefer leaving them, rather than to take them at one-third discount.

Mr. Pottle. — Before any new topic is entered upon, I desire an expression of opinion whether it is beneficial or not to wash tags. As high an authority as Senator Simmons, of Rhode Island, said he considered it a positive damage to tags to subject them to soaking in a tub, and then to put them into the fleeces; that he would far rather have them rolled up by themselves, and then sold with the fleeces. If he misled me, I wish you to put me right.

Then, with regard to unwashed tags being put up with washed

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Mr. R. G. HAZARD, of Rhode Island. — I am afraid, that, until we have some practical method of giving the wool-producers pay for these strings, we shall never meet the difficulty. I think it comes back to this: Determine what is the best mode, and, if a respectable number of wool-growers adopt it, in the nature of things they will get paid for it. They will get as much more for their wool as it is worth; and, if it is worth more than enough to pay for the additional cost of the strings, there will be an advantage to those who adopt the practice.

Mr. W. F. Greer, of Ohio. — I can bear witness to the fact, that there has never been a moment in our market when a man who chose to buy a good string, of the character described, and was willing to pay thirty-five or forty cents a pound for it, could not get it. I have used that kind of string myself for some years. I was led to do so from selfish motives, not knowing that the manufacturers objected to the cheap string. I tie up my own wool, and I have suffered from sore fingers in consequence of it; and any gentleman who thinks any thing of his fingers would be perfectly willing to pay the extra expense necessary to procure a better article of twine. But still the large quantity that is bought in our neighborhood is sold for eighteen cents a pound; and, with wool at a dollar a pound, it affords a very handsome profit.

The matter of washing tags is another subject that has been brought to our attention. I wish to confirm the remarks of my friend, Mr. Pottle, upon that subject. It was formerly the custom with our people to wash their tags in tubs, and extract all the filth they could, so that they were absolutely as clean as it was possible to make them by cold water. But, during the last two years, acting upon the advice of our principal buyers, they have changed the practice; and it is now the uniform custom to put the tags in the wool as they come from the sheep, unwashed. This has been done in accordance with the wish and at the request of the wool-growers. I think Mr. Pope can speak more advisedly in regard to the northern part of Ohio: but I believe the

custom is becoming more and more prevalent in our State; and, if there is any fraud or error in it, the regular buyers are the persons who are censurable for bringing it about.

Mr. George W. Bond, of Massachusetts.—I wish to say, in addition to what the gentleman has just stated with regard to this practice which has obtained of late of putting dirty tags and dead wool into the fleeces, that when wool comes to market, and is offered for sale, if they are found rolled up in the fleeces, it is regarded as a fraud, and the buyer is considered entitled to an allowance for any such foreign matter thus rolled up in the fleeces, and frequently a great deal of trouble arises from that cause.

I think Mr. Montgomery must have misunderstood the remarks of the gentleman who spoke with regard to the one-third discount. Mr. Kingsbury, to my surprise, did say, that he was not aware that there was any such fixed custom as that of deducting one-third on unwashed wool.

Mr. Kingsbury.—No, sir: I said I was not aware of any arbitrary rule of that kind.

Mr. Bond. — Well, up to within eight or ten years, the custom in our market was to deduct twenty-five per cent; but, to conform to all the other markets, I should say it had been the invariable custom, for ten years past, to deduct one-third. It was not necessary for a person to ask the question what allowance was made on unwashed wool. Unless there was a special stipulation for a different allowance, the party purchasing a lot of fleece wool was entitled to one-third discount on the unwashed fleeces.

Mr. Blanchard. — You refer to the unwashed fleeces in a lot of washed wool?

Mr. Bond. — Yes, sir. An entire lot of unwashed fleeces was sold according to its merit. But I should say, that, in a majority of cases, the manufacturer would prefer leaving them, rather than to take them at one-third discount.

Mr. POTTLE. — Before any new topic is entered upon, I desire an expression of opinion whether it is beneficial or not to wash tags. As high an authority as Senator Simmons, of Rhode Island, said he considered it a positive damage to tags to subject them to soaking in a tub, and then to put them into the fleeces; that he would far rather have them rolled up by themselves, and then sold with the fleeces. If he misled me, I wish you to put me right.

Then, with regard to unwashed tags being put up with washed

fleeces. There is a little confusion, I think, in regard to this. If they are rolled up in washed fleeces, and the whole sold as washed wool, of course it is a fraud. I have known a dozen trials of such cases, and never one without a conviction, and never a conviction that was not followed by most exemplary damages. But if, following out the custom of any portion of the country, or in accordance with an understanding with the wool-buyers, a man puts his tags into his fleeces, and says to the buyer, "This is washed wool, but the tags are put in unwashed, in accordance with the custom of the country," there is no fraud on the part of the seller, though there may be on the part of the broker, when he sells the wool to the manufacturer.

Judge COLBURN, of Vermont. — I can give gentlemen my own conviction upon this subject. These tags should be put up by themselves in a sack, and sold as unwashed wool, one-third or one-quarter off, just as seems to be proper.

Mr. POTTLE. — That is the way we do it.

Judge Colburn.—I never in my life—and I have been growing wool forty years—put a tag in with my fleeces. I have kept the tags separate, and carried them to some factory and exchanged them for cloth. One year, Mr. Bingham, a Boston dealer, came to my place, and, seeing the tags tied up by themselves, said, "I want to get one lot of wool without any tags, and I will give you three cents a pound more for that wool than I would if it had tags in it." I believe, that, if we should get into the habit of keeping the tags entirely away from the fleece, and sell them by themselves, the manufacturers would pay us a price that would be remunerative. We should dispose of our tags for what they are worth by themselves.

Now, I wish to propound one question to the manufacturers, and that is, whether they have any objection to fleeces being split.

Mr. George Kellogg, of Connecticut.—It seems to me that the object of splitting fleeces is to give the impression to the buyer that the wool is light wool. Light, small fleeces generally have less coarse wool in them than large fleeces. Just cut in two a buck fleece, and it gives the impression to the buyer that there are two fleeces of light wool. I think it is a species of deception.

Mr. Blanchard.—One word upon that point. In opening a fleece of wool for sorting upon the sorter's board, it is spread out, and the lower qualities in the fleece are taken off; and, if it is a well-bred fleece, in many cases the whole of the inside part of the fleece will go into one sort. If you cut the fleece in two, it is certainly more incon-

venient for the sorter and the manufacturer than if the fleece is entire.

The President (Mr. Bigelow in the chair). - Some six or eight years ago, after my fleeces got to be pretty heavy, a buyer came to look at them one day, and we began to talk of splitting. Said I to him, "Would there be any objection to splitting those fleeces?"— "No," said he, "not if we understand it."—"Supposing I give you notice I am going to split my fleeces?" said L - "I wish you would," said he. (He was not a manufacturer; he was buying to sell again.) Well, I directed my men to split some of the fleeces, and he marched off. He had not got more than a hundred yards from the barn before I began to consider why it was he was so very willing I should split my fleeces. I didn't have to think a great while; and said I, "Boys, put those fleeces together again, just as they were: we won't have any split fleeces go from this barn." The object of splitting is to commit a fraud on somebody; and a high-minded producer will not make himself, even indirectly, a party to a fraud. If I raise a ram fleece, I will keep it together, and call it a ram fleece. Mr. Pottle says, if I tell a man I am going to do it, it is no fraud. I don't suppose it is. If I tell a man I mean to do a dirty thing, and he don't object to it, it is no fraud. But if he, through my act, commits a fraud on somebody else, I am an accessory to the crime, if I don't commit it directly.

Mr. Pottle. — One word. Don't let us tread upon each other's toes here. My friend from Ohio [Mr. Greer] says it is the custom in his country to put the unwashed tags in with the fleeces. Now, in that case, when it is a recognized custom, can they be accused of fraud? It is a bad practice, I admit. I want to ask my friend if I understood him correctly.

Mr. Green. — Most certainly. But perhaps, in justice to our growers and myself, I ought to state, that we have but a very small number of what are known here as full-blooded sheep. The universal practice is to tag them quite early in the spring, before they leave the stables. The matter of putting the tags up separately, just as my friend Mr. Kingsbury has described, was suggested to the buyers; and they objected to it. They said, "We want you to put that part of the wool which you think belongs to each fleece with each fleece."

Mr. A. Pope, of Ohio. — My friend Greer referred to me when he was on the floor before: but I thought perhaps the President would come to his rescue, and save the credit of Ohio wool-growers; for I really think they need some apology. I can only say, that I do not

think his statement applies to the whole of Ohio. It may to some neighborhoods; but, as a general thing, it is not the case in Ohio that they put up the tags without washing.

Mr. Greer. — I trust my friend Mr. Pope and the Convention understood me. I meant only that this was the case in my particular neighborhood, where the buyers have created the custom.

Mr. Pope.—I will not dispute it. One of your buyers bought a lot of wool for me; and, I must say, it was the most extraordinary lot of wool that I ever had come from your neighborhood. I have bought wool in other sections, where I have been served in the same way; and I considered it a fraud upon me. It is so with strings also. Some of the strings are quite six feet long, and tied with a double bow-knot a foot long! If I had known what course this debate was going to take, I would have brought a pocketful of those strings, just to show you what they are. But then the string is all out in sight; and we make a calculation, just as though there was a stone of a pound weight in the wool.

Mr. Blanchard.—I am sorry to say,—and I think every wooldealer and manufacturer will justify me in the remark,—that the character of Ohio wool has deteriorated within the last five years, in the estimation of Eastern men, until it stands to-day no higher, the bulk of it (there may be exceptions), than Michigan wool. I certainly think I am safe in saying that it has declined, in the estimation of Eastern men, from eight to ten per cent. I speak now of the wool of the State, as a whole. There are many honorable exceptions.

Mr. Pottle. — There is just this which I desire to say, to be put right alongside of what the gentleman from Connecticut says. For the last three years, you gentlemen manufacturers have not had a buyer out in the State of New York who has not met us constantly with this statement: "The reason why we don't give you as much for your wool as we do for Ohio wool is because your wool isn't put up so well as the Ohio wool. Put up your wool as they do in Ohio, and we will pay you as much as we do for Ohio wool." Now, how is that?

Mr. Montgomers. — If the Convention will pardon me, I wish to add my mite to the information which is to be given here, that all may share in the benefits of this meeting. The remark is made by the gentleman from Connecticut, that Ohio wool has depreciated in reputation at the East. Many of us understand that very well; and I may as well say to you, that you will understand it better in four or five years than you do now, unless some other course is taken than the one you

have pursued of late. I am not finding any fault with you; but you, as well as we, must submit to the natural course of things. It may be possible that there are gentlemen within the hearing of my voice who have known, by reputation, the clip of wool brought from Ohio as belonging to Cortland, Montgomery, and Brown. It may be that none of you have ever heard of it: it matters not whether you have or not. We had a very nice lot of sheep, taking in those three flocks. I question whether the State of Ohio had then, or ever had had before, or ever has had since, a better lot of wool for the manufacturer than that was. That wool, bred with the greatest care that we were able to give it, kept in the nicest condition in which we were able to keep it, washed in the best manner that we knew how, - taken late enough in the season for the water to be warm and comfortable, so that we need not be in a hurry, and when the river was clear, - wet all over, and suffered to go back to the pen and stand perhaps an hour to soak, and then taken again to the river and washed by the hands of our hired men, the owner himself standing in the water, and every sheep passing through his hands before it could go out, - put up with just string enough to hold it, and then offered in the market. During John Brown's time, we made an effort to get some sort of compensation for that kind of wool, put up in that condition; and, for a year or two, that wool was brought eastward, assorted and sold all along from forty-five to eighty-five cents a pound, which gave us pretty good satisfaction. But as it was Mr. Brown's misfortune, and perhaps our misfortune, that he was one of that class of men who run things until they run them into the ground, that arrangement was broken up; and we went back to the ordinary plan of selling our wools at home. after having pursued that course for some years, it occurred to us that it didn't pay very well. Those fleeces would weigh about two pounds and a half, — a little more or a little less, — and we could sell them for a few cents more than the ordinary wools of the country. Getting a little tired of that, I purchased some sheep that gave heavier wool; and the man who had bought wool of me, whose name was Brown, and who bought very largely in Ohio, came to my house and began to scold, because I would let my nice light-wool sheep go down to raise that heavy wool. "Now," said I, "Brown, I would very much rather raise this nice wool, and I would very much rather put it up in fine condition; I am an enthusiast over it; I have done it for years, and I don't like to sacrifice it: but you will come along, and give Tom, Dick, and Harry forty-seven and forty-eight cents for their wool, and will haggle

with me for forty-nine and a half. I have done business for fun long enough; I am going to raise some wool that will pay. If you will give me seventy or eighty cents, or something that shall compensate me for my labor, I will raise the other kind of wool cheerfully; but if forty-seven cents buys ordinary wool, and forty-nine and a half buys this nice wool, we will change the programme." That is the reason why Ohio wools have deteriorated in value, and are bound to do so, until some other course is taken and some other plan is adopted.

Mr. Blanchard. — I did not mean to throw any disparagement on Ohio wool. I think that wool very desirable, — more desirable than any other, except Pennsylvania wool.

The fourth subject for discussion was then taken up; to wit, the wool best adapted to the various manufactures, especially that of worsted.

The President. — We should be glad to know what you do with our wools; what kind of wools go into what kind of fabrics. We should be glad of some practical information upon that subject.

Mr. HAZARD. — The President of our Association [Hon. E. B. Bigelow] has paid more attention to this subject, perhaps, than any other person; and I hope we shall hear from him upon it.

Mr. Blanchard.—If the inquiry is with reference to worsted wools particularly, I think our Secretary has some facts in regard to it that will be of interest to the wool-growers here. But, sir, in connection with that, if I may be indulged with the attention of the assembly for a few moments, I would like to express briefly some views of the different kinds of sheep, which, in the estimation of manufacturers, it would be desirable to raise in this country.

There are diversified interests among the manufacturers. There is a great diversity of talent among them. One man, possessing a taste, a cultivated taste if you please, for fancy articles, will enter upon the manufacture of those fabrics that are styled fancy goods, and succeed in them admirably, and to the entire satisfaction of himself, as well as benefit to the community. Another man, attempting to produce the same article, would fail in business in less than six months. I know some men who have spent almost a lifetime in making black doeskins, until they have attained a perfection in the article that is almost unsurpassed by the Germans. Let those same men attempt to manufacture a cheap article, and the probability is that they would fail to accomplish their object.

Now, I have thought that perhaps the same principle might apply to wool-growers. In my experience with the wool-growers of the country. I have sometimes found a man who would take a Saxony flock of imported sheep, retain all their excellence, and continue to improve on that flock, until he had secured perhaps one of the best in the United States. I have now in my mind one man in Washington County, of whom you may have heard, - I mean Mr. Samuel Patterson, - whose flock was, if not superior, at least fully equal, to any other in the State of Pennsylvania. He had a taste for it; and, by his knowledge of the habits of Saxony sheep, he was enabled to cultivate them, and to cultivate them with success. Other men prefer to cultivate the merino sheep; and, in the application of their minds to that branch of sheep culture, they have been eminently successful. Another class of men. living near large cities, who may go into Canada, or into some of the sections of the country where a large kind of sheep are grown, purchase their stock, take them to the vicinity of the large cities, put them upon their pastures, feed them until they become fat, and then take them to market and sell them for mutton: such men, though the wool that is upon these sheep is coarse wool, are successful in that branch of sheep husbandry. Hence, it seems that we need this diversified application of the talent of the country in the production of the raw material, as much as we need the diversified talent that exists among manufacturers in producing the various articles we want.

Now, if this is so, — I make these remarks to throw the thought before the minds of the wool-growers, - is it wise to abandon the growth of Saxony wool? If I mistake not the public sentiment of the wool-growing community at the present time, it is that the grade of wool which is usually denominated merino, is fine enough to meet the wants of all the manufacturers of this country. Let me assure you that it is not so. Unless you do produce the Saxony wool, we, as manufacturers, will be forced to resort to foreign markets for a supply. There are certain fabrics manufactured to-day that cannot be made without that grade of wool which is denominated Saxony wool, - fine wool, - finer than any other that is produced in this country (I use the words as they are practically used among farmers, without specifying the difference that exists between them). If you wish to-day to make a very fine broadcloth, - and, if the object we have in view is carried out, that the manufacturers of this country are to supply the wants of the country, — you must have clean, fine wools to do it; such wools as the Australian, Cape of Good Hope, or German wools. If you don't, you cannot make the article.

I will give you an instance, to show the difficulty of getting this fine wool, which illustrates the point I have in view. I am engaged in the manufacture of ladies' shawls. The consumption of our mill, for the year, is about 350,000 pounds. In the last six months, I directed the sorters, if they found what we term a "pick-lock" fleece, to lay it aside. During these six months, they have only saved about four hundred pounds of that quality. The next grade we use is what is ordinarily denominated the fine wool of this country. From that we have made an article, which, when taken to New York, was sold to a prominent importer at an advance of thirty-three and a third per cent over any article of the kind ever made in this country, I believe, except, it may be, something that was made for exhibition at a Fair.

I only allude to this to show that that kind of wool must be produced in this country, if we intend to supply the demand of this country for fine fabrics. If that be so, is it wise on the part of the wool-growers of this country to abandon the raising of fine wools? I know you may turn on me, and say, "You won't pay us for it;" but I say we will pay you for it, if you will sell it as cheap as we can get it from the foreign grower, and not without. That is plain common sense: I say we can pay you for it; and I say, that, if properly classified, and properly presented to the manufacturer, you can get your price for it. But you can't take your Saxony wool to the manufacturer of fancy cassimeres, who wants a medium grade of merino wool, and expect that he will pay you as much for it as the manufacturer of fine broadcloths, fine doeskins, and fine shawls. Unless you can present that wool to the manufacturer who wants to use it, you can never get its value. If it is sold to the passing buyer, who is travelling round the country, he will give perhaps a cent and a half a pound more for it than for ordinary wools.

I simply call your attention to this matter, that you may think upon it, and act upon it as your judgment may dictate. I now renew my call upon our Secretary, for facts in his possession in relation to worsted wool.

Mr. John L. Hayes, of Massachusetts. — I will respond with pleasure to the request of the gentleman from Connecticut, and submit to the Convention some considerations bearing upon the importance of increasing the production of combing or worsted wools in this country; but, before addressing myself to that special subject of inquiry, I desire to call attention to some facts which will throw light upon the extent to which wool in general is used in the textile arts, and which will illus-

trate the demand in the markets of the world for this material, and the tendency of the age towards its increased consumption. There is no more interesting or practical question, to the producer of wool especially, than the inquiry whether there is a demand for his product, and whether there will be such an increased demand as will continue prices, and justify him in expending capital for increased production.

In pursuing this inquiry, we are struck with the observation that nature is economical in the supply of the raw material, or rather in the varieties of raw material, which are to be worked up by man. How few are the great natural staples which make up the bulk of commercial commodities! But the uses of any raw material, which is found applicable in the arts, are infinite. We utterly fail to imagine the new applications to which such raw material may be made. Every improvement in the arts, in chemistry or machinery, each new step in the progress of civilization or luxury, increases the modes of application, and consequently the demand. The demand for a particular fabric or manufacture may cease through change of fashion, but the demand for the raw material never.

The demand for wool received its most important impulse in modern times at about the commencement of the present century, or perhaps the latter part of the last century, from the great improvements which were made in cotton machinery, which were applied also to wool. The improvements in the spinning jenny, the introduction of the power-loom, and the establishment of the factory system, multiplied the power of the manufacturer to such an extent, that an unprecedented demand for wool Then the increased use of other kindred fibres added began to arise. also to the consumption of wool. It is a curious fact, that cotton, although it has always been regarded as the rival of wool, has added largely to its consumption. It is stated by English observers, that the use of cotton warps has added vastly to the extent to which wool is used in England. Entire factories are now engaged in the manufacture of cotton warp; and it is found, that, by the use of this warp with woollen filling, cotton, instead of being a competitor, is the most important auxiliary of wool.

I will now refer to the statistics which illustrate the progress of the demand for this material. The increase in the consumption of wool is strikingly shown by a comparison of two periods in England, no further apart than thirty years. The importations of wool into England thirty years ago were—from Germany, in round numbers, 74,000 bales; from Spain and Portugal, 10,000 bales; the British Colonies, 8,000 bales; sundry other places, 5,000 bales. Total in 1830, 98,000

Now, compare these imports with those of 1862 and 1864. In 1862, the imports from Australia were 226,000 bales; from the Cape of Good Hope, 66,000 bales; from Germany, 29,000 bales; from Spain, 1,000 bales; from Portugal, 11,000 bales; from Russia, 40,000 bales; from the East Indies, 52,000 bales; from South America, 80,000 bales; sundry other places, 96,000 bales. Total, 585,000 bales. Then we come to 1864, and we find from Australia, as against 226,000 in 1862, 302,000 bales; as against 66,000 from the Cape of Good Hope in 1865, 68,000; as against 80,000 from South America in 1862, 99,000. In all, in 1864, 688,336 bales.

Comparing that with the importation only thirty years before, we have 688,000 bales as against 98,000. Australia now supplies more than three times the whole amount of foreign wool consumed in England a third of a century ago. The production of South America exceeds the whole consumption then. In this short period, the consumption has actually increased sevenfold. The production of wool in England is 250,000,000 pounds; the imports, 184,000,000; the exports, 54,000,000,—so that the total amount consumed in England is 380,000,000 pounds. Add to that the shoddy, of which 65,000,000 pounds are consumed, and we have the enormous total of 445,000,000 pounds of wool consumed in England alone.

Now this increase of production and consumption is not confined to England alone: it goes on in the same ratio in other countries. In 1861, France exported woollen goods of the value of 188,000,000 francs; in 1863, 283,000,000 francs. The production of Germany, Russia, and Austria, is increasing in the same ratio; so that we have now, it is estimated, a consumption in all the world of 1,600,000,000 pounds of wool, and yet hundreds of millions of people, as in China, are just beginning to appreciate the value of woollen fabrics. Even France has but just commenced to supply herself with carpets.

The testimony taken before the House of Lords in 1828 shows, that, although less than 98,000 bales of wool were brought into England at that time, every warehouse was filled with wool, and stocks were lying on hand sometimes for five or six years; whereas, at the present time, as I am informed by at English gentleman of great intelligence, and a very large dealer in wool, Mr. Bowes, the warehouses are exhausted, and there are no stocks on hand. The demand is fully up to the supply.

The facts in relation to prices are not less interesting. In 1855, the price of English combing-fleeces was 1s. 1½d. In 1864, the price of

the same wools was 2s. 4d. Australian fleeces averaged in 1855, 1s. 8d.; in 1864, 1s. 10d. Cape fleeces in 1855, 1s. 5d.; in 1864, 1s. 4d. Buenos Ayres, fair mestizo, in 1855, 7d.; in 1864, 8d. Cordova, in 1855, 8\frac{3}{2}d.; in 1864, 11\frac{1}{2}d.

Thus we see that the fine wools have not declined: they have kept about the same ratio.

But the question still remains, Will the demand for the fine wools, relatively to other kinds, continue? In considering that question, it is worth while to look at the production of Australia particularly, and the facts which show the extraordinary increase in the ratio of production in the Australian Colonies. In 1797 three merino rams and five ewes were carried there; but so slow was the introduction of the production of wool into those colonies, that it was not till 1807 — ten years later - that the first bale of wool was carried from Australia to England. But the flocks of Australia did not originate from that The development of fine wool husbandry in these colonies was the result of an accident. Some English whalers captured in the South Seas, about the beginning of the present century, a vessel proceeding to Peru from Spain, in which there were three hundred merino rams and ewes. These sheep were carried to Australia, and originated the fine merino wool, whose production is now estimated at 100,000,000 pounds; and are sold in special market at London, to which all the manufacturers of the world resort. The production of fine wool of La Plata is estimated at 100,000,000 pounds; and of the Cape, at 50,000,000 pounds. And when you remember that only a portion of Australia has been developed, and that the vast and fertile interior still remains to be opened up, who can tell what shall be the production in the future? The Pampas of the Argentine Republic offer even a more unbounded field for production. They present a vast uplifted alluvial plain, eight hundred thousand square miles in extent, presenting an ocean of verdure, where wool-growing in the production of fine wool called mestiza, or improved wool, is pursued with more vigor and profit than in any other part of the world, with the single drawback that the value of the wool is greatly impaired by burrs derived from a species of clover peculiar to the vegetation of the Pampas. In view of the fields for the production of fine wool, thus rapidly expanding, which are opened abroad, it is well to inquire whether it may not be desirable to turn our attention to some other of the various kinds of wool in which the competition of foreign countries is not likely to be so formidable.

In considering this matter, the producer of wool should not overlook the competition with clothing or merino wool of a material which was not known in manufactures until the present century. I refer to shoddy, or rather that variety of shoddy known in England by the name of mungo. The term "shoddy," strictly speaking, is the name applied to fibre made from soft rags, from flannels and blankets which were first used in manufacture of cloth. The use of this material originated at Batley, in England, in 1813. Mungo is the fibre obtained from hard rags of fine broadcloth, such as clippings from the tailors' shops. This was not introduced until later, and the manufacturers of Batley were quite incredulous of its being utilized. The Yorkshire man, who first conceived the idea of using the fibre of hard rags, obstinately replied to the objection that the material could not be introduced, "It mun go" (it must go). It did go, and a new substance was introduced into the arts, and a new word into the English language. Of shoddy and mungo sixty-five million pounds are consumed in England, more than our whole clip of wool in 1860. It is estimated that twenty-five thousand persons are employed in converting shoddy into cloth, and that the value of the product is five or six million pounds sterling. The fact, however, to which I wish to call attention is, that shoddy comes in competition with fine or cloth-wool only. It is not used in the manufacture of worsted, and does not take the place of combing-wools.

When we look at the facts as to prices before given, we find that the English combing-fleeces were worth in 1855 only 1s. 11d.; in 1864 they were worth 2s. 4d.; that is, they had more than doubled in ten years, while cloth-wools had just about held their own in respect to price. England is the only country which has devoted itself exclusively to the production of the long combing-wools required for the manufacture of worsted. She cannot, or does not, produce any fine wool. There are, in fact, no merino sheep in England. It is believed, however, that England has attained to the utmost production of this wool, of which her limited territory is capable. The manufacturers of Bradford are already alarmed, and have issued circulars to induce a greater supply of lustre wools. England is the only country which now produces, to any extent, the long combing-wools. It is found that in Australia the combing-wools cannot be grown; and they cannot be grown at the Cape. I have the authority of Mr. Bowes for saying that the experiment has been fully tried, and has signally failed; that Leicester, Cotswold, and Lincolnshire sheep have been repeatedly carried to Aus-

tralia and the Cape, and every effort made to introduce the culture of long-wooled sheep; but it has been found, that after a little while the wool is converted into hair, and it is now admitted that the long combing-wools cannot be grown in Australia or at the Cape. But the combing-wools can be grown in the United States. The fact of the fitness of this country for the growth of combing-wools is completely established by the success which has attended the production of that kind of wool in Canada. The amount of combing-wools now produced in Canada is between five and six million pounds. The quality, in the English market, is not regarded as by any means equal to their own combing-wools, because the same care is not taken in its production, and the English complain that the wool is full of burrs. In England the most extraordinary care is taken. The fields are actually swept, that the fleeces may receive no injury from dirt. But our worsted manufacturers have found the Canada wools perfectly good substitutes for the English wools, and have paid as high as \$1.40 currency for wool worth five years ago only twenty-eight cents. The attempt has been made in this country to manufacture alpaca goods from this long combing-wool, for which, by reason of its lustre, it is peculiarly fitted. There was some failure in the first experiment, and the manufacturers supposed that the wool was not suitable. They then sent to England, and imported a thousand pounds of the best combing-wool; and, upon a comparison of that with the combing-wool of Canada, it was found that the Canadian wool was equal to the English in every respect. I have here some specimens of this fabric, which is called "alpaca," because it is an imitation of the fabrics made from alpaca wool. (The speaker held up the specimens to the view of the Convention.) This stuff is made of a filling of the long combing-wool of Canada with a warp of cotton. The fabric is equal in finish and lustre to any imported from England.

The question is eminently worthy of the consideration of our farmers, whether the long-wool husbandry may not be profitably introduced into this country. This is a question upon which we, as manufacturers, pretend to give no opinion. We can only assure the farmers of the United States, that there is a growing demand for this material, that there will be less competition in the growth of this wool than in any other, and that the prices are certain to be higher than for any wool which can be grown in this country. To determine the question of profit, it will be necessary that experiments upon an extensive scale be tried, and will be doubtless necessary that a system of husbandry

should be developed in this country analogous to the four-field system in England, but fitted for the peculiar necessities of our soil and climate. I can conceive of no subject more worthy of the attention of the National Association of Wool-Growers, formed here to-day, or of the boards of agricultural colleges in the several States.

It may be said that the introduction of long-wool husbandry will · interfere with that already established in this country. I see no force in this objection. It is probable that this kind of sheep husbandry can be profitably carried on only in those districts where there is a demand for mutton, and where the mutton will be as much an object as the wool. It seems to me, Mr. President and gentlemen, that the development of this species of sheep will not interfere with the branches of sheep husbandry which are now pursued, but will give an increased demand for the peculiar kind of merino wool now being produced by the intelligent skill of the Vermont breeders. Dr. Loring this morning quoted some remarks of mine in reference to the peculiar value of the American merino fleece. I am convinced that the fabrics to which the coarse merino wool that seems to be in favor here is best adapted, has not yet been manufactured in this country to any extent. The class of goods to which that wool is peculiarly fitted are the fabrics somewhat analogous to the goods called "coburgs" and the goods called "merinoes" and "thibets," the soft stuff goods for women's wear. Now, in that branch of manufacture, or that of stuff goods as distinguished from cloth goods, France employs three hundred thousand persons. In this country, there were not five thousand employed in 1860. The remarkable development of that branch of industry in France is attributed to the peculiar qualities of the merino wool which the French possess. This wool is long in staple, the sheep are of unusual size, and the fleeces heavy, having in fact the very characteristics of the American merino. M. Bernoville, a very eminent manufacturer and a practical man, who has written a work on the combing-wool industry of that country, - one of the most learned works that has ever been written upon any branch of the practical arts, - describes these fabrics in detail, and gives the reasons why France has obtained such eminence in their production. The most important reason which he gives is in these words:-

"The first fact that we ought to proclaim abroad is, that without the introduction of the Spanish race into our flocks, and without all the skill of our agriculturists, we should still vegetate in dependence upon neighboring nations, and should be reduced to clothe ourselves with their stuffs. It is to

the admirable revolution in the raising of ovine animals that we owe the beautiful industry of spinning the merino combing-wools. It is to this that we owe the splendor of the industries of weaving combing-wool at Paris, at Rheims, at Roubais, at Amiens, and St. Quentin."

Now, I wish to enforce this position. In order that the worsted manufacture should be developed in this country, - and by the worsted manufacture I mean the manufacture of stuff goods in their infinite variety for female apparel and furniture trimmings, &c., as distinguished from cloth goods, - there must first be a supply of long combing-wool from sheep of the English breed. The development of the manufacture created by the supply of these wools will be the most certain means of creating the demand for the long merino wools for soft stuff goods, for which I have shown they are peculiarly fitted. We are as yet but in our infancy in our manufactures. before us, as wool-growers and manufacturers, is to clothe all the people of the United States with our wool and our fabrics. We have but just commenced the work; and when a full supply of raw material is furnished, and grower and manufacturer are encouraged by a stable system of protection, the imagination can hardly conceive the grand field which will be opened in this country in the industry of wool and woollens.

You will excuse me, Mr. President, for dwelling upon agricultural questions which do not strictly belong to my department. I am not a practical man in such matters. The only right to speak upon the subject of wool and sheep which I claim to have is the hereditary right which I derive from the fact, that my father, an extensive farmer in the State of Maine, was the introducer by his own importation of the first Saxony sheep into that State; and that, when a boy eleven or twelve years old, I have spent many a cold night in caring for the poor lambs, too tender for that excessive climate, born in the freezing nights of February. It is with no little pleasure that I find the interest connected with the association of my boyhood revived by the pursuits of maturer years, and strengthened by the instructive discussions to which I have listened to-day.

Allow me, before I sit down, to allude to a relic of aboriginal history which was vividly brought to my mind yesterday as I journeyed for the first time on my way to this place through the valley of the Mohawk. Some years ago, I visited some of the Indian tribes which still survive in the eastern parts of the State of Maine, and was struck with the singular tradition which I found remaining

among them of the strength and ferocity of their ancient enemies, the tribe of Mohawks. The Indian mother, it was said, still quiets her crying child by breathing the terrible name of Mohawk. It is the way of ignorant and barbarous people to cherish the memories of ancient hatred. It is the triumph of civilization to do away with old enmities and prejudice. We sit here to-day, gentlemen, near the old council grounds of the departed Mohawks; and we, gentlemen, we of the Eastern tribes, have come up to-day to meet you, gentlemen of the West, with no recollection of the old feud which has divided us so long. "We have," to quote the language of one of your letters, Mr. President, "washed off our war paint, if any yet remains." We have buried the hatchet; we have smoked the calumet of peace; and, in this first council of once-hostile interests, we have founded an alliance which I trust will inaugurate a new and auspicious era in all our industries.

Mr. George W. Bond, of Massachusetts. - In my position as Chairman of the Committee on Raw Materials, I have given some attention to this subject. Our annual import of worsted goods from Great Britain is about fifty million yards; besides a very large amount, of which we have no accurate record, from France. Those from France are principally of a character for which our long merino wools are admirably well adapted. We need to make all the varieties of goods that we consume in this country, of all the varieties of wool that we produce. Had I known, before I left home, that this question was to come up in this form, I could have prepared myself with an approximate statement of the quantity required of the different kinds of wool. In round numbers, we require some fifteen million pounds of wool, in the state in which it generally comes to market. A little of the grade of wool such as it is unprofitable to grow here is grown on the plains west of the Mississippi; but the amount is trifling. The great bulk of the wool which we require is of the merino grade, which we use for our cassimeres, flannels, and delaines; and I trust, that, as we increase in the development of the length of the staple of the merino, the fabrics which the Secretary has referred to will soon be added. Experiments are being made now which I think will lead soon to their extensive manufacture. The other great branch of manufacture is that of worsted goods, of which there is a great and immensely increasing consumption, requiring a class of wool, the value of which alone seems to have been increased by the advance in cotton. We have now no hinderance to that manufacture in this country, save a supply of the raw material. As has been stated, we have hitherto imported from three to five million pounds from Canada; and from that supply we shall be cut off, if the Reciprocity Treaty is closed the coming spring. What those concerns will then do who have embarked in the manufacture, I cannot foresee. We should readily and promptly consume in this country, I think, not less than twenty million pounds of such wools, if we had the supply.

Another class of wools for which we require, for our present consumption, the equivalent of ten or fifteen million pounds, at least, of washed wool, - say twenty to thirty million pounds in the condition in which we receive it, - are the finer wools, grown in South America, Australia, and the Cape, for the manufacture of goods requiring a close filling and superior finish, which we have been unable to obtain hitherto from any considerable amount of wool grown in this country. Some of the wools grown in Virginia, have had these qualities; and, when Virginia and East Tennessee come to be settled by Northern men, I hope we shall, from that source, and possibly from some parts of Texas, be able to obtain wools which are adapted to these uses. Until then, we must depend upon foreign markets for our supply. But it is the earnest wish of all connected with the woollen and worsted manufacture, so far as I know, that the growth of these wools should be undertaken; that experiments should be made to ascertain what part of the country is best adapted to them; and that we should have a supply of our own growth.

While I am up, I would allude to a question, the importance of which I have felt for a great many years. That is, the necessity for a careful study, scientific and practical, of the influence of climate and soil upon wool. All of us here present know that they have an immense influence. What that influence is, has never been settled, I believe, nicely, thoroughly, in this country or any other. In a country so extended as ours, with every variety of climate and soil, it is of more importance than it can be to any other nation in the world. When Professor Agassiz first established his Museum of Comparative Zoölogy, it was a part of his plan to connect with that institution the study of this important subject. The plan he laid out was so vast, that, in bringing it into practical order, he had not reached that when the war began. The war took off a number of young men upon whom he depended to enter with him upon this department of science, and it has thus been delayed. But I hope, when he returns, he will soon be able to take it up there; and the Institute of Technology, also, hopes to devote a part of its attention to the study of that and other matters connected with the practical arts.

Mr. R. G. HAZARD, of Rhode Island. - When I was up on a former occasion, I referred to the direct interest the wool manufacturer had in the ability of the wool-grower to produce his wool in the cheapest and most economical manner. Perhaps the wool-grower has an equal interest in the ability and skill of the manufacturer to work up the raw material into goods of the greatest possible value. And upon this subject of worsted wools, I think the producer may find encouragement in the fact that the manufacturers are acquiring skill in that direction perhaps more rapidly than in any other. Some of them have alluded to that subject, and seem discouraged in regard to their ability to produce that kind of wool. But the experiments on which this opinion is founded were probably tried when such wools were very much lower in proportion than they are now. There is, however, an important consideration connected with that; and I think it very desirable that this subject should be seen in all its bearings. That consideration is, that those kind of wools are grown upon large sheep. Now, in this country, the mutton seems to be comparatively a small object. In Great Britain, the mutton is the main object, and the wool merely an incidental production. I have no doubt, that many of their farmers, if they should hear of our keeping sheep merely for their wool, would appear as much astonished as some of ours are when they hear of Russian farmers keeping pigs for their bristles. That may affect the production of this kind of wool; but, when we become more a mutton-eating people, it may be more judicious for us to raise these large sheep.

Connected with that subject, there is a merely theoretical view, which I should like to state, and learn from practical men how far their experience bears out the theory, in regard to the size of sheep, or any other animal. We are all aware that the surface upon which the wool grows increases as the square of the linear dimensions; while the carcase, which has to be sustained to produce that wool, increases as the cube. For instance, if you begin with the linear dimension two, the square, being four, will represent the surface upon which the wool grows; the cube, which is eight, representing the carcase of the sheep which has to be sustained. Now, if you double the linear dimensions—instead of making them two, make them four,—you have a surface upon which the wool grows of sixteen; and the cube will be sixty-four. In the one case, it is as one to two; in the other, as one to four According to that calculation, it would seem that we ought to raise the greatest quantity of wool per acre upon small sheep.

Mr. WM. R. SANFORD, of Vermont. - I would like to ask M.

Hayes what length of wool is necessary to produce those fabrics of which he speaks.

Mr. HAYES. — I understand that the greater the length, the more advantageously it can be used; but that a length of two and a half inches to three inches will suffice. I am speaking of fine wools. The coarse wools — the English combing-wools — should be six or eight inches in length.

The President.—I will answer Mr. Hazard's question. It is a fact universally recognized among practical producers, that small sheep have more surface in proportion to their weight than large ones.

Mr. Blanchard. — One word in regard to this coarse wool to which reference has been made. Some gentlemen here may form their estimate of the value of coarse upon the price that prevailed six or eight years ago. Let me state one fact. The wool to which our Secretary has referred is ordinarily sold to-day at seventy cents a pound. Six years ago, it would not have brought over forty-five or fifty cents.

Mr. Pottle.—I desire to say to our friends who represent the manufacturing interests here, that from the very bottom of my heart I thank them for the courtesy with which they have listened to our inquiries, and the kindness and alacrity with which they have answered them. I would also say, in behalf of the producers, that we have, to the best of our ability, tried to ascertain the wishes of the manufacturers in regard to putting up our wools, and certainly mean to try to avail ourselves of the information we have obtained here.

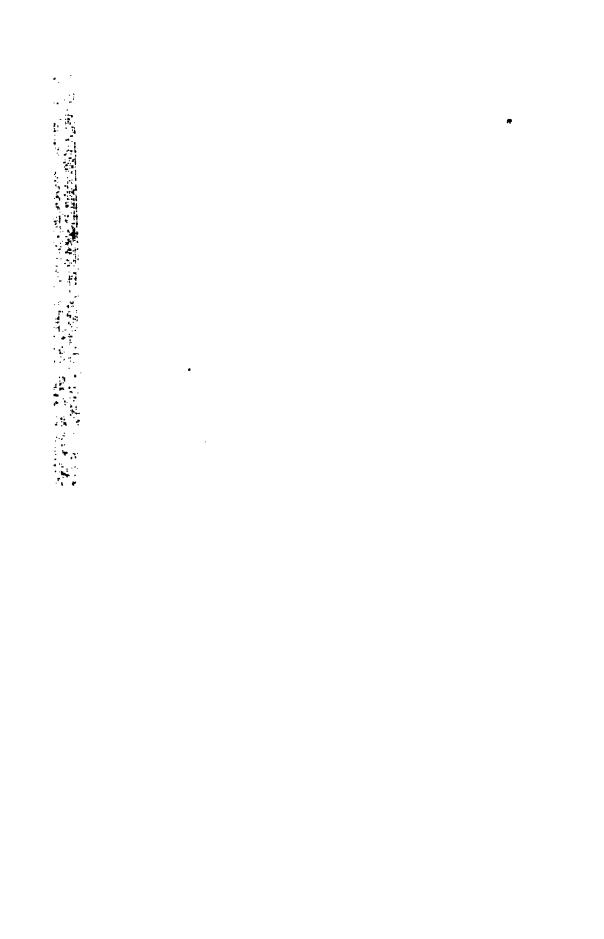
On motion of Dr. LORING, it was -

Voted, That the thanks of the Convention be tendered to the city authorities of Syracuse for their courtesy in granting the use of the City Hall for its sessions.

On motion of Mr. POTTLE, it was —

Voted, That the thanks of the Convention be presented to Hon. H. S. RANDALL, for the ability and efficiency with which he has presided over its deliberations.

The Convention then, on motion of Mr. POTTLE, adjourned sine die.



JOINT REPORT

of

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THE EXECUTIVE COMMITTEE OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS,

AND OF

THE EXECUTIVE COMMITTEE OF THE NATIONAL WOOL-GROWERS' ASSOCIATION,

ADDRESSED TO

The United States Revenue Commission,

FEB. 9, 1866.

BOSTON:
PRESS OF JOHN WILSON AND SONS.
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It may be said that the introduction of long-wool husbandry will interfere with that already established in this country. I see no force in this objection. It is probable that this kind of sheep husbandry can be profitably carried on only in those districts where there is a demand for mutton, and where the mutton will be as much an object as the wool. It seems to me, Mr. President and gentlemen, that the development of this species of sheep will not interfere with the branches of sheep husbandry which are now pursued, but will give an increased demand for the peculiar kind of merino wool now being produced by the intelligent skill of the Vermont breeders. Dr. Loring this morning quoted some remarks of mine in reference to the peculiar value of the American merino fleece. I am convinced that the fabrics to which the coarse merino wool that seems to be in favor here is best adapted, has not yet been manufactured in this country to any extent. The class of goods to which that wool is peculiarly fitted are the fabrics somewhat analogous to the goods called "coburgs" and the goods called "merinoes" and "thibets," the soft stuff goods for women's wear. Now, in that branch of manufacture, or that of stuff goods as distinguished from cloth goods, France employs three hundred thousand persons. In this country, there were not five thousand employed in 1860. The remarkable development of that branch of industry in France is attributed to the peculiar qualities of the merino wool which the French possess. This wool is long in staple, the sheep are of unusual size, and the fleeces heavy, having in fact the very characteristics of the American merino. M. Bernoville, a very eminent manufacturer and a practical man, who has written a work on the combing-wool industry of that country, --- one of the most learned works that has ever been written upon any branch of the practical arts, --- describes these fabrics in detail, and gives the reasons why France has obtained such eminence in their production. The most important reason which he gives is in these words:-

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Mr. HAYES. — I understand that the greater the length, the more advantageously it can be used; but that a length of two and a half inches to three inches will suffice. I am speaking of fine wools. The coarse wools — the English combing-wools — should be six or eight inches in length.

The President.—I will answer Mr. Hazard's question. It is a fact universally recognized among practical producers, that small sheep have more surface in proportion to their weight than large ones.

Mr. Blanchard. — One word in regard to this coarse wool to which reference has been made. Some gentlemen here may form their estimate of the value of coarse upon the price that prevailed six or eight years ago. Let me state one fact. The wool to which our Secretary has referred is ordinarily sold to-day at seventy cents a pound. Six years ago, it would not have brought over forty-five or fifty cents.

Mr. Pottle.—I desire to say to our friends who represent the manufacturing interests here, that from the very bottom of my heart I thank them for the courtesy with which they have listened to our inquiries, and the kindness and alacrity with which they have answered them. I would also say, in behalf of the producers, that we have, to the best of our ability, tried to ascertain the wishes of the manufacturers in regard to putting up our wools, and certainly mean to try to avail ourselves of the information we have obtained here.

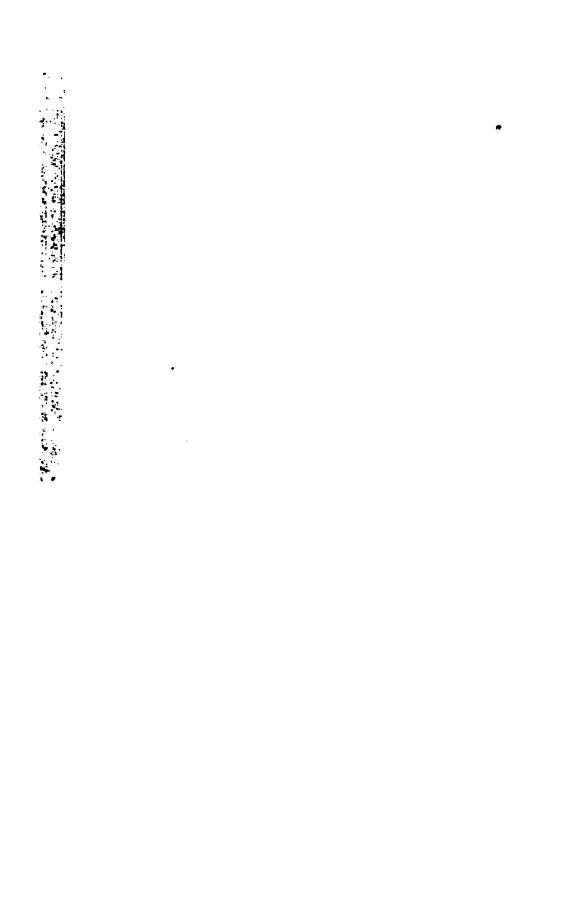
On motion of Dr. LORING, it was —

Voted, That the thanks of the Convention be tendered to the city authorities of Syracuse for their courtesy in granting the use of the City Hall for its sessions.

On motion of Mr. POTTLE, it was —

Voted, That the thanks of the Convention be presented to Hon. H. S. BANDALL, for the ability and efficiency with which he has presided over its deliberations.

The Convention then, on motion of Mr. POTTLE, adjourned sine die.



JOINT REPORT

d (parn.)

OF

THE EXECUTIVE COMMITTEE OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS,

AND OF

THE EXECUTIVE COMMITTEE OF THE NATIONAL WOOL-GROWERS' ASSOCIATION,

ADDRESSED TO

The United States Revenue Commission,

FEB. 9, 1866.

BOSTON:
PRESS OF JOHN WILSON AND SONS.
1866.

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JOINT REPORT

OF

THE EXECUTIVE COMMITTEE OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS,

AND OF

THE EXECUTIVE COMMITTEE OF THE NATIONAL WOOL-GROWERS' ASSOCIATION,

ADDRESSED TO

United States - Wood growers and work namifactures.

The United States Bebenue Commission,

FEB. 9, 1866.

BOSTON:
PRESS OF JOHN WILSON AND SONS.
1866.



NEW-YORK CITY, Feb. 9, 1866.

To Hon, STEPHEN COLWELL,

U.S. Revenue Commission, Philadelphia.

SIR,

The undersigned have been directed by the Executive Committees of the National Association of Wool Manufacturers, and of the National Wool-Growers' Association, assembled in Convention at the city of New York, on the 17th of January, 1866, and finally adjourned on this day, to present to you, as the member of the United-States Revenue Commission specially intrusted with the consideration of questions of revenue applicable to wool and woollens, the following Report.

We have the honor to be, very respectfully,

Your obedient servants,

R. W. MONTGOMERY,

President of the Convention.

JOHN L. HAYES, Secretary.

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JOINT REPORT.

The undersigned, members of the respective Executive Committees of the National Association of Wool Manufacturers, and of the National Association of Wool-growers, submit that the above-named Associations represent a large majority of the individuals and companies now engaged in the United States in the production and manufacture of wool. The undersigned, members of the Committees aforesaid, have been empowered to present to the United-States Revenue Commission the views of their respective Associations, and together represent, as fully as would be practicable by any organization, the whole woollen interest of the United States. To avoid circumlocution in the following statement, the personal pronoun plural we will be used to designate the two Executive Committees above named, acting jointly in their representation of the woollen interest of the United States.

We would, in the first place, call the attention of the Revenue Commission to the important fact, that the present is the first occasion, in the history of this country, when the woollen interest as a whole has been represented before any national body. The two great branches of this interest, agricultural and manufacturing, have been divided for fifty years, just as they were for a century in England. There were no opportunities for correcting mutual misunderstandings and imparting mutual information, so necessary for comprehending the real identity of both interests. The result was, that each branch of the

woollen industry approached the national councils, in invoking legislation, from its own point of view. The legislation, in relation to this industry, vacillated therefore as each interest predominated; and instability became its most characteristic feature, and checked its legitimate progress.

The recent formation of the National Association of Wool Manufacturers presented the first opportunity to the manufacturers as a body, to open the way to a better understanding. The government of this Association, in November last, instructed its Executive Committee to invite the several state organizations of wool-growers to meet them for consultation in relation to interests which belong to them in common, and especially to consider what answers should be made to the inquiries of the United-States Revenue Commission as regards the great wool-producing and wool-manufacturing industries.

This invitation was frankly accepted; and the representatives of both interests met in convention at Syracuse, New York, on the 13th day of December, 1865.

As the resolves and sentiments of that Convention form the basis upon which, it is hoped, that the woollen interest, as a whole, is hereafter to be represented, not only to the Commission, but the national councils, we present to the Commission copies of the resolutions passed unanimously by the Convention, and a few extracts from addresses of officers and delegates, which were received without dissent, and which indicate, with great distinctness, the sentiments of both manufacturers and wool-growers as to the basis of their future relations.

Mr. E. B. POTTLE, of New York, Chairman of the Committee on resolutions, on presenting the report of the Committee, said:—

It gives me great pleasure to say, that the series of resolutions which we shall report to this body have been agreed upon unanimously. Perfect harmony and unanimity have marked the proceedings of the Committee from beginning to end. The Committee report the following resolutions for the consideration of the Convention:—

"Resolved, That, of the great industries with which the people of the United States can occupy themselves to advantage, the woollen interest is especially commended for combining and developing in the highest degree the agricultural and mechanical resources of the nation.

"Resolved, That the mutuality of the interests of the wool producers and wool manufacturers of the United States is established by the closest of commercial bonds,—that of demand and supply; it having been demonstrated that the American grower supplies more than seventy per cent of all the wool consumed by American mills, and, with equal encouragement, would soon supply all which is properly adapted to production here; and, further, it is confirmed by the experience of half a century, that the periods of prosperity and depression in the two branches of woollen industry have been identical in time, and induced by the same general causes.

"Resolved, That as the two branches of agricultural and manufacturing industry represented by the woollen interest involve largely the labor of the country, whose productiveness is the basis of national prosperity, sound policy requires such legislative action as shall place them on an equal footing, and give them equal encouragement and protection in competing with the accumulated capital and low wages of other countries.

"Resolved, That the benefits of a truly national system, as applied to American industry, will be found in developing manufacturing and agricultural enterprise in all the States, thus furnishing markets at home for the products of both interests.

"Resolved, That it shall be the duty of the respective Executive Committees of the National Manufacturers' and National Wool-Growers' Associations to lay before the Revenue Commission and the appropriate Committee in Congress these resolutions, together with such facts and statistics as shall be necessary to procure the legislation needed to put in practical operation the propositions therein set forth."

The President of the Convention, Mr. RANDALL, a woolgrover, said: —

This convention, or conference, will, I trust, mark the introduction of a new era in some of the important relations subsisting between two great industrial interests. The American wool-producers and manufacturers have entertained differences of opinion on the subject of the respective duties which should be imposed on imported raw and manufactured wool. Those differences have led to repeated and severe

contests in Congress, in nominating conventions, and even at the polls. The whole history of our tariff legislation on this subject has been a history of sudden, and, occasionally, violent changes in measures, and even in policy. Having elsewhere attempted to trace the effects of our different woollen tariffs on the two interests most directly involved, I will not repeat myself here. But I will call your attention to one great and significant fact which has been clearly established amidst all these struggles and changes. It is that when the Government has protected the manufacturer at the expense of the producer, or the producer at the expense of the manufacturer, the injurious consequences have fallen not alone on the branch of industry discriminated against, but upon both. This was inevitable; for, in reality, their interests are indissolubly connected. Neither could possibly flourish without the other, under any circumstances which have occurred in our country, or which can reasonably be expected to occur for generations to come.

Mr. Bigelow, President of the Manufacturers' Association, said:—

As more than seventy per centum of the wool required for our vast and varied manufactures is of home growth, the interdependence of domestic wool-growing and wool manufacturing becomes apparent. Neither one of these industries can long prosper, unless the other prospers also. Taken together, they constitute an interest scarcely second in importance to any of the great industries which promote the welfare of the people, and sustain the prosperity of the nation.

This great interest owes its present growth to national legislation, and is largely dependent on the same agency for its future success. Without the equalizing aid of discriminating custom duties, we can hold no successful competition with the accumulated capital and low wages of older countries. If the woollen interest of the United States is to continue to prosper, it must be maintained in a position to contend even-handed with the woollen interest of Germany, of France, and of Great Britain.

The only contest which can give success to our efforts, lies, not between ourselves as wool-growers and wool manufacturers, but between us and the wool-growers and wool manufacturers of other nations. This is a struggle that challenges our united forces, as between ourselves there is no real ground of antagonism. On the contrary, we are one in interest, and should be allied in purpose.

Dr. Loring, a wool-grower, said: -

A recognition of the true relations which exist between the manufacturer of the East, and the wool-grower of the West and South, can alone give firmness and prosperity to each. It needs no elaborate argument to prove that the domestic market for American wool should be the best market. The same prosperity which has attended the growth of manufactures in other countries must attend their growth here. That great system of free-trade which exists between the States demands for the foundation of our domestic commerce an equal development of each section, and energy, activity, and success in each special branch of business. New York and Boston, the two great centres of manufactures, the two great wool markets of the country, offer facilities for trade, which can be found by us in no foreign port. Lowell and Lawrence, and all the manufacturing villages of the North, afford the American wool-grower his most convenient market. And it is upon the growth and vigor of this section, that the wool-producing sections of the United States must depend for their largest and most reliable, sure, and constant profits.

On the other hand, where can our mills look for the raw material, out of which to manufacture certain classes of goods, with more propriety and to better advantage than to our home production, so far as it goes? The styles of wool produced within the limits of the United States are adapted to those fabrics which we have succeeded thus far in manufacturing to the largest profit. And there is no reason why the American manufacturer should not patronize that territory included within the boundaries of his own government, by providing himself with the raw material from thence, and by availing himself, in return, of that market for his manufactured goods, which is good in proportion to the sale it meets with, for its agricultural products.

Mr. E. B. Pottle, chairman of the Committee on Resolutions, and a wool-grower, observed:—

I desire to say, in behalf of the Committee who reported the resolutions now under discussion, that they reported them with the general expectation that we were entering upon a new era, so far as regards these two great interests, the wool-manufacturing and wool-producing interests; and I think I may add, that the general feeling all round the committee room was, that bygones should be bygones. The past cannot be recalled; and whether the present tariff bears equally upon these

two great interests or not, is a matter which cannot be determined by a resolution, however carefully drawn. But we can agree upon certain principles, — upon a common platform, where we can all stand; and on that common platform we can commence that work which we believe will be not only for our mutual interest, but for the benefit of all the interests of the country. That was the theory upon which we prepared these resolutions.

There can be no question, — it does not argue common sense in any man to get up and maintain the contrary, upon the great principles of political economy, — there can be no question, I say, that it is best for any country under heaven to produce the articles it manufactures, and manufacture the articles it produces, as far as possible. Any government that is a buyer of the products of a foreign government, when it can produce those articles itself, must of necessity be engaged in a miserable business, to the extent which it does it. As has been said by the friend who preceded me, the true wealth of a nation depends upon the products of the soil, and the labor that is bestowed in fitting those products for the use of man; and every dollar which we pay to encourage the labor of other countries, to stimulate the production of other countries, is so much taken from our own, and so much taken from the actual wealth of the country. Hence it should not be surprising, that we, who claim to be at least possessed of common sense, representing these two interests, - the wool-growing and wool-manufacturing interests of the country, - should come here prepared to lay down, in the form of resolutions, a platform affirming simply the fact of the mutuality of these two great interests; that, looked at from a proper stand-point, - looked at from the stand-point which every good citizen should occupy, a stand-point which compels him to ask, not only for that which is best for him, but which is best for the whole country, - looked at from that stand-point, I say, no other conclusion could be come to, than that which we have put forth in these resolutions; that is, that the interests of the manufacturer and the interests of the producer are but one great mutuality, and whenever one is unduly elevated at the expense of the other, the country suffers.

Mr. Kingsbury, a manufacturer, said:—

For one, I am rejoiced to find myself here face to face with the wool-growers of the country; and I rejoice to give to you, the wool-growers of the country, my pledge, that, in time to come, we, the manufacturers, will feel that our interests are mutual, and that we can-

not sustain the one, without sustaining the other. The wool-grower and the wool manufacturer must go hand in hand; and, if we will thus go hand in hand, I believe we can procure such legislation as shall be necessary to protect your interests, and such legislation as shall be necessary to protect our interests; so that the great wool-growing and wool-manufacturing interests of the country, now larger perhaps than any other interests, shall go on in a state of prosperity beyond even our highest expectations, and we shall loom up before the world as a people unsurpassed in our manufacturing interests.

Mr. HAZARD, a manufacturer, said: -

While I am upon this point of mutuality, which I think is one of the most important we have to discuss, I will merely remark, that perhaps, from a proper point of view, we may consider the wool-growers as the manufacturers of cloth. They are engaged in the first of a series of processes by which grass and grain are converted into cloth. There are other processes more or less divided in different countries and in different sections. Sometimes the spinning is done by one man, who transfers the yarn to another to be made into cloth; and, in England, it is quite common for the maker of the cloth to transfer it to the finisher, to be colored and finished. Now, I say we can no more separate the interest of the wool-grower and the wool manufacturer in this country, than we can separate the interest of the spinner from that of the maker of the cloth, or that of the maker of the cloth from that of the finisher: they are indissolubly united together.

In the spirit of these resolutions and sentiments, we propose now to state the present condition and necessities of the woollen interest of the United States.

The number of sets of machinery or series of cards—a set forming the unit for calculation in woollen machinery—employed in the United States, reported to the Manufacturers' Association on the 25th of October, 1865, was 4,100. The estimated number in the United States, as all were not reported, is 5,000. The distribution and weekly consumption of foreign and domestic wool appear in the following table:—

expenses of carrying the duty on the wools, the internal taxes, the duties on drugs and other materials used in manufacture, and to furnish the required protection.

While recognizing fully the correctness of the principles upon which the present tariff laws are based, it is our duty to point out defects in their practical operation. It has been proved by official returns, that, while it was the manifest intent of the law of 1864 that the minimum rate of duty upon the class of wools most directly competing with our own should be six cents per pound, the average rate of duty upon this class of wools actually paid has been less than five cents per pound. The American producer has been thus deprived of the intended protection.

In view of the facts above stated, and of the requirements of our manufactures for an increased supply of American wool, and in order to furnish a stimulus for such supply, and, at the same time, to secure "equal encouragement and protection to both interests," we recommend as a basis for the re-adjustment of the revenue laws applicable to wool and woollens, the following propositions:—

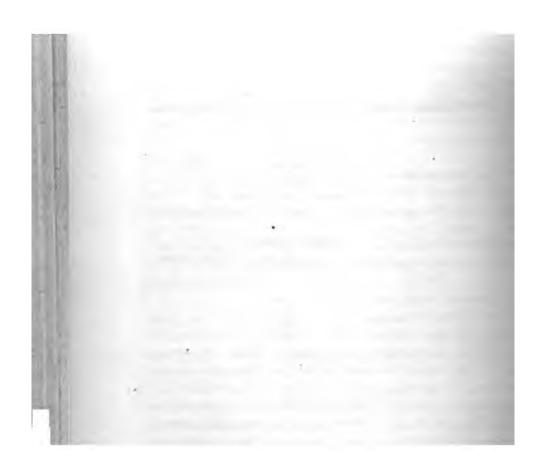
- 1. A provision to be inserted in the tariff laws requiring all wools now known as Mestizo, Metz, Cape, and Australian wools to be subjected to a duty of not less than ten cents per pound and ten per cent ad valorem; said provision to be so worded as most effectually to prevent these and similar wools from being admitted at a less rate of duty; the rates of duty on all other wools to remain as they now are, with the exception of wools the growth of Canada, which, in the absence of treaty stipulations, shall be subjected to a duty of (blank) cents per pound.
- 2. All manufactures composed wholly or in part of wool or worsted shall be subjected to a duty which shall be equal to twenty-five per cent, net; that is to say, twenty-five per cent after reimbursing the amount paid on account of duties on wool, dye-stuffs, and other imported materials used in such

The Value of the Woollen Manufacture is shown in the following

TABLE,

Showing the Value of Woollen Goods manufactured in the United States, for the Year ending June 30, 1864. Calculated from Official Report of United-States Commissioner of Internal Revenue.

STATES.	Manufacturers of WOOL not otherwise pro- vided for.	Clorhs, and all Textile, Knitted or Felted Fabrics of WOOL, before dyed, printed, or prepared in any other manner.	Manufacturers of WORSTED not otherwise pro- vided for.	TOTAL	
MAINE	Dollars. 3,288,098.67	Dollare. 288,385.00	Dollars.	Dollars. 8,476,488.67	
NEW HAMPSHIRE	9,044,762.00	84,915.00		9,079,677.00	
VERMONT	8,145,988.67	562,788.00		8,708,721.67	
MASSACHUSETTS	38,905,399.00	800,581.88	897,720.67	40,603,651.00	
RHODE ISLAND.	2,968,154.88	7,668,581.67	261,014.88	10,892,700.38	
CONNECTICUT	11,878,768.67	8,918,965.00	78,912.88	15,866,641.00	
New York	10,850,180.00	2,214,802.67	912,792.88	18,977,775.00	
New Jersey	2,752,652.00	25,861.67	70.88	2,778,084.00	
PENESTLYARIA	18,022,447.88	8,502,190.00	75,076.00	16,599,713.88	
DELAWARE	548,184.67			548,184.67	
MARYLAND	450,885.88	1,526.67	1	451,912.00	
WEST VIRGINIA	58,486.00	5,267.00		68,753.00	
Kentucky	117,584.88	242,870.67		859,905.00	
Missouri	72,980.00	2,864.00]]	75,844.00	
Оню	1,815,248.00	85,684.67		1,400,877.67	
Indiana	545,128.88	11,794.88	1,692.67	558,615.88	
ILLINOIS	841,907.00	11,884.00	5,798.88	859,084.88	
Місніван	118,094.00	88,754.88		151,848.88	
Wisconsin	104,457.67	860.00		105,817.67	
Iowa	102,815.67	15,489.67		118,305.33	
Мінивота	8,696.00	450.00		9,146.00	
KANSAS	14,947.67			14,947.67	
CALIFORNIA	588,956.00			588,956.00	
OREGON	128,620.67	·		128,620.67	
NEBRASKA TERRITORY	45.67			45.67	
				121,868,250.88	



Hational Association of Edool Manufacturers,

1866.

SECOND ANNUAL REPORT

PRESENTED TO THE ASSOCIATION AT THE

THIRD OF OCTOBER, 1866.

NV.

JOHN L HAYES,

HEPERYANY.

BOSTON:

PRESS OF JOHN WILSON AND SON. 1800.



National Association of Wool Manufacturers, U.S.

1866.

SECOND ANNUAL REPORT

PRESENTED TO THE ASSOCIATION AT THE

ANNUAL MEETING, AT NEW YORK, ON THE THIRD OF OCTOBER, 1866.

BY

JOHN L. HAYES.

SECRETARY.

BOSTON:
PRESS OF JOHN WILSON AND SON.
1866.

during the whole year; where the sheep are never housed or fed by hand; where taxes are inconsiderable, and where wages are reduced to the mere demands of physical subsistence.

The manufacturer, on his part, has to contend chiefly with the looms of Belgium, Germany, and France, which supply the greater portion of our foreign woollen fabrics. M. Bernoville, in a very careful work upon the woollen industry of France, estimates the average pay of 320,000 workmen, employed in the woollen manufacture, at one franc twenty-five centimes per day, for three hundred days' work, or twenty-five cents per day. The wages paid to the persons employed in manufactures in Belgium, as obtained from the "Statistique generale de la Belgique," are, in the woollen manufacture, as follows:—

Men ave	rage	•		•		•	•		•	•	32 c	ents	per	day.
Women	"						•				18	"	"	"
Boys	"			•	•				•		13	39	"	19
Girls			_				_	_			12			_

The hours of labor, twelve to fourteen per day.

The average rates of interest from 1846 to 1860, as shown in tables of admitted accuracy, in Europe and this country, are as follows: — In England 3.90, in France 4.10, in the United States 9.12; the interest in this country being more than double the average on the other side. The cost of constructing a manufacturing establishment in Europe is shown, by reliable statements, to be one-half the cost of an establishment on this side. The cost of an establishment abroad being one-half, and the rate of interest less than one-half, the result is that the capital required for manufactures in this country is four times that required by our rivals in Europe.

We present these facts without any further argument as to the necessity of relief against foreign competition.

The question next arises as to our position under the present laws.

It is our duty to the Revenue Commission, as well as to the several interests which we represent, to submit at length our

views of the operation of the present tariff laws, in their application to the production and manufacture of wool.

In order to understand clearly the object sought for in adjusting the present tariff on wool and woollens, it will be necessary to consider the operation of the two preceding tariffs; viz., those of 1846 and 1857, each of which having proved to be defective in opposite directions, suggested changes which were necessary to perfect a system equitably adjusted to the two branches of the woollen interest.

The tariff of 1846 placed, in the main, a duty of thirty per cent upon both wool and woollens; and, in some cases, a less duty upon the latter than upon the former. This arrangement was justified to popular opinion by its apparent equality. But the equality existed only in name. The grower of the wool had the full benefit of the protection of thirty per cent, without any drawbacks or neutralizing duties; and the arrangement would have proved most beneficial to him, at least, if the manufacturer had continued to consume his wool. But the manufacturer, being the consumer of wool, had to pay the whole of the duty of thirty per cent by which the grower was protected, which, when deducted from the duty on the manufactured article, left him a protection so inconsiderable as to be unavailing. Burdened with this heavy duty, and receiving no equivalent, he had to contend with a foreign rival, who had the vast advantage of obtaining his wool without duty. Waiving argument upon the theoretical question of the equality or justice of this arrangement, it is sufficient to refer to the practical fact, that the system, whether sound or not in theory, proved most disastrous in its actual results to both interests.

The manufacturers, encouraged by the policy of the tariff of 1842, had attempted the branches of manufacture requiring the utmost skill, and demanding large capital and expensive establishments. No less than eighteen hundred looms were in operation in the manufacture of broadcloths. The woolgrowers, encouraged by the demand for the finest cloth-wools

required in this manufacture, imported Saxony sheep, and had made progress in the growth of the finest wools, distinguished in Germany as noble wools, which, if continued, would have placed this country at the present time on an equality with Silesia in the production of such wools. The manufacturers of fine cloths found it in vain to struggle against foreign rivals, who, in addition to cheap interest and cheap labor, had the crowning advantage of free wool. The higher branches of the manufacture were abandoned, soon every one of the eighteen hundred of the broadcloth looms in the country ceased work. The only branches of manufacture continued with activity were those like flannels, which were supplied by the common wool of the country, --- so superior in its spinning qualities as in itself to afford an advantage over the foreign manufacture. There was no longer a demand for any but common wools. The Saxon-wool husbandry ceased with the manufacture of fine cloths, which had called it into existence.

When we consider the position which Germany now has in the growth of the finer wools and the manufacture of broadcloths,—supplying the whole world with the products of her flocks and looms,—and remember that the corresponding industries of this country, if not checked by unwise though apparently equitable legislation, would have advanced in a geometrical ratio, we must regard the blow which prostrated alike the wool-grower and the wool manufacturer as one of the most disastrous that has ever fallen upon the industries of our country.

Armed with arguments, derived from the state of things above described, against giving preponderating consideration to the wool-grower, the manufacturers, on their side, approached the national councils, and invoked legislation which should regard their interest as the predominating one of the country. The result was the passage of the Tariff Bill of 1857, which imposed a merely nominal duty upon wool, and protected the manufacturer by a duty of twenty-four per cent. This tariff,

although temporarily advantageous to the manufacturer, did not continue long enough in operation to furnish facts as to its effect upon both interests, such as a longer experience under the tariff of 1846 had afforded. The obvious disadvantage to the manufacturer of the policy of the tariff of 1857 was its inherent instability.

The manufacturer investing large capital in structures and machinery which cannot be diverted to other purposes, and which may not give returns until years of operation, demands above all things stability of legislation. This he could never expect under a system which made the agricultural interest secondary to his.

Influenced by these considerations, and candidly acceding to the reclamations of the wool-growers, the manufacturers cordially responded to the proposal of the Committee of Ways and Means of the thirty-seventh Congress; and particularly of the subcommittee, presided over by the distinguished member from Vermont, whose name is identified with the policy mainly due to his influence, to so adjust the tariff upon wool and woollens as to give not merely nominal but absolute equality to both branches of the woollen interest.

Whatever may have been the practical working of the Morrill tariff, which is the basis of our present system, it is a matter of history, that equality of adjustment was the main object of the provisions of that bill and the Tariff Bill of 1864, respecting wool and woollens.

The object sought in these bills was to give a sufficient protection to the wool-grower, and to place the manufacturer in the same position as if he had his wool free of duty. A duty supposed to be sufficient to protect the wool-grower against wools competing with his own was placed upon such wools, and such a specific duty was placed upon woollen cloths as was supposed to be sufficient to reimburse the manufacturer for the amount of the duty paid on the wools. The ad-valorem duty on the cloths was added to reimburse to the manufacturer the

expenses of carrying the duty on the wools, the internal taxes, the duties on drugs and other materials used in manufacture, and to furnish the required protection.

While recognizing fully the correctness of the principles upon which the present tariff laws are based, it is our duty to point out defects in their practical operation. It has been proved by official returns, that, while it was the manifest intent of the law of 1864 that the minimum rate of duty upon the class of wools most directly competing with our own should be six cents per pound, the average rate of duty upon this class of wools actually paid has been less than five cents per pound. The American producer has been thus deprived of the intended protection.

In view of the facts above stated, and of the requirements of our manufactures for an increased supply of American wool, and in order to furnish a stimulus for such supply, and, at the same time, to secure "equal encouragement and protection to both interests," we recommend as a basis for the re-adjustment of the revenue laws applicable to wool and woollens, the following propositions:—

- 1. A provision to be inserted in the tariff laws requiring all wools now known as Mestizo, Metz, Cape, and Australian wools to be subjected to a duty of not less than ten cents per pound and ten per cent ad valorem; said provision to be so worded as most effectually to prevent these and similar wools from being admitted at a less rate of duty; the rates of duty on all other wools to remain as they now are, with the exception of wools the growth of Canada, which, in the absence of treaty stipulations, shall be subjected to a duty of (blank) cents per pound.
- 2. All manufactures composed wholly or in part of wool or worsted shall be subjected to a duty which shall be equal to twenty-five per cent, net; that is to say, twenty-five per cent after reimbursing the amount paid on account of duties on wool, dye-stuffs, and other imported materials used in such

manufactures, and also the amount paid for the internal revenue tax imposed on manufactures, and upon the supplies and material used therefor.

E. B. BIGELOW,
T. S. FAXTON,
EDWARD HARRIS,
J. W. EDMANDS,
S. W. CATTELL,
H. KINGSBURY,
THEODORE POMEROY,

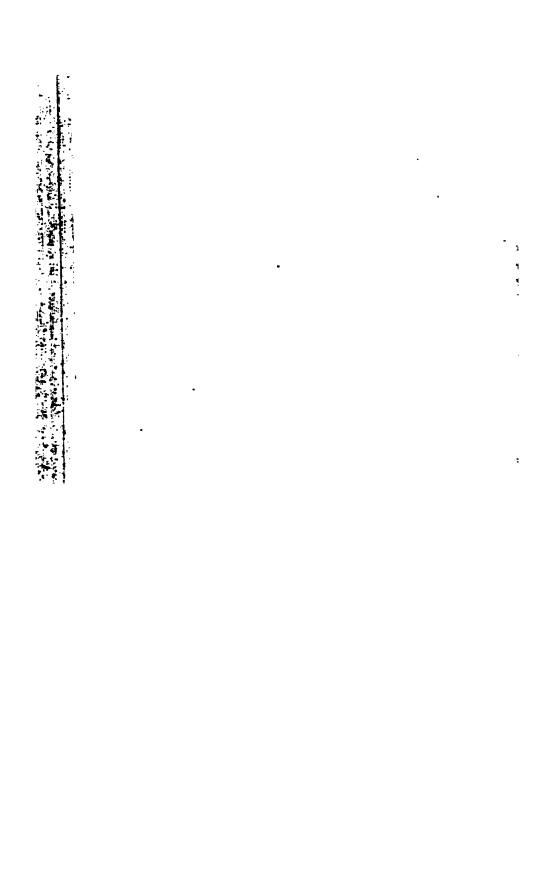
Executive Committee of the National Association of Wool Manufacturers.

HENRY S. RANDALL, E. B. POTTLE, E. HAMMOND, R. M. MONTGOMERY, GEORGE B. LORING,

Executive Committee of the National Wool-Growers' Association.

JOHN L. HAYES,

Secretary of the Joint Committee.



National Association of Wood Manufacturers,

1866.

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SECOND ANNUAL REPORT

PERSUSTED TO THE ASSOCIATION AT 1905.

ANNUAL MEETING, AT NEW YORK, ON THE THIRD OF OCTOBER, 1866.

BY

JOHN L. HAYES,

SUPPLIESUS.

HOSTON: TRESS OF JOHN WILSON AND SON: 1866.



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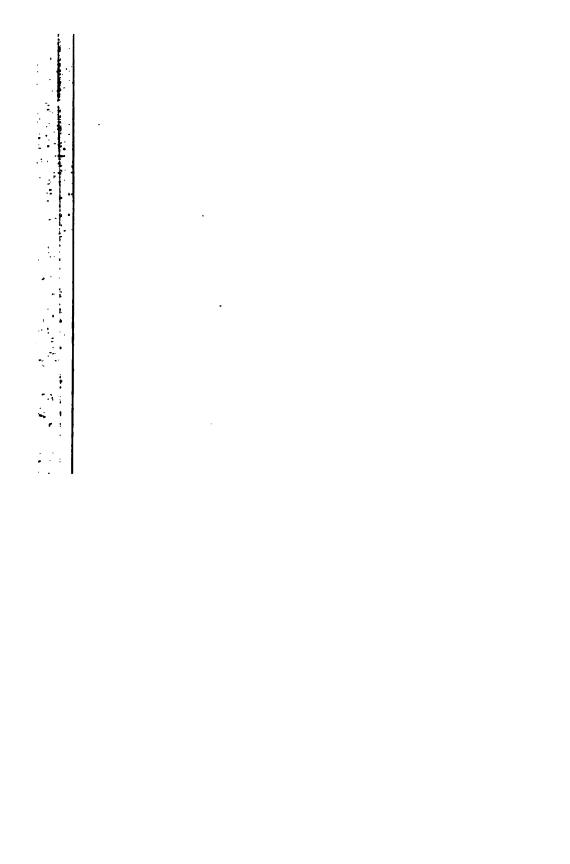
ANNUAL MEETING, AT NEW YORK, ON THE THIRD OF OCTOBER, 1866.

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JOHN L. HAYES.

SECRETARY.

BOSTON:
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SECOND ANNUAL REPORT.

In conformity with the By-Laws of the Association, I have the honor to submit a Report, prepared under the direction of the Government, of the transactions and condition of the Association for the past year.

It is unnecessary to remind our own members, that the single object declared in our articles of Association is "promoting more effectually, by all appropriate means, the advancement and prosperity of the woollen interest." We are limited to no particular sphere of labor, and are committed to no school of political economy. By our organization, we have that freedom of action which the wisest political philosophers declare should be the policy of a State, the liberty to adopt whatever system of legislation shall most effectually promote the wealth and happiness of its people. It was contemplated at the period of our organization, that emergencies would from time to time occur, demanding the discretionary exercise, by the Government of the Association, of the power entrusted to it of acting for the prosperity and advancement of the woollen interest. Such emergencies have occurred since our last annual meeting, giv-

In his essay on the "Positive Philosophy of Comte," Mr. John Stuart Mill remarks: "M. Comte is equally free from the error of considering any practical rule or doctrine that can be laid down in politics as universal and absolute. All political truth he deems strictly relative, implying as its correlative a given state or situation of society. This conviction is now common to him with all thinkers who are on a level with the age; and comes so naturally to any intelligent reader of history, that the only wonder is how men could have been prevented from reaching it sooner." It is a logical deduction from the admission of the great English free-trader, that the commercial system advocated for Great Britain furnishes no rule for this country, with its different "state and situation of society."

ing occasion for the transactions which have mainly occupied the last year. These occasions have not been sought, nor have they arisen of necessity from the nature of our organization. They have grown out of the necessities and demands of other interests, with which we are most intimately connected, and which we cannot control. No option was left to the Government of the Association as to encountering issues vital to the prosperity of the interests in their charge.

At the meeting of the Government in November last, the first after the annual meeting, a communication was submitted from a member of the Revenue Commission, charged with the investigation of questions relative to revenue and tariffs, requesting information as to the position and necessities of the woollen interest, suggesting the intercourse and co-operation of our Association with the wool-growers of the United States, and intimating a desire that the Association should appoint a permanent Committee for consultation with the Internal Revenue Commission. Interrogatories, prepared for the purpose of soliciting the information thus desired, were submitted at this meeting, and afterwards distributed to our members. ecutive Committee, consisting of the President, Mr. Bigelow, and Messrs. Edmands, Harris, Pomeroy, Faxton, Kingsbury, and Cattell, was appointed at this meeting; and this Committee was endowed with full powers to act in relation to all questions of tariff or revenue, affecting the woollen interest, which might arise before the Revenue Commission or Congress. In consequence of Mr. Colwell's communication, an eminent representative of the wool-growing interest, and also an honorary member of our Association, had been specially invited to be present at this meeting. Mr. Randall, the gentleman referred to, communicated the fact, that several important State organizations of wool-growers were in existence. It being manifest, that, through the intercourse of the Association with these bodies, the views of the Revenue Commission, as to a co-operation of the two interests, might be carried out, the Executive Committe was instructed to invite the several State organizations of wool-growers to meet them on the 13th of December, 1865, for the purpose of consultation in relation to their mutual interests; and especially as to the representations to be given respecting the wool producing and manufacturing interests, before the Commission above referred to.

The members of the Executive Committee, after conferring in Boston on the 28th of November, and making arrangements for the proposed convention, met in the city of Syracuse on the 12th of December, and were joined by the delegates from the Association, who had been invited to the convention. On the morning of the 13th of December, they proceeded to the city hall, where the convention was assembled. A full phonographic report of the proceedings was prepared, under the direction of the Secretary, which has been printed and distributed to our members.

The convention, the first of the kind ever assembled in this country, and forming an epoch in our industrial history as an example of the concert which may be established between interests supposed to be antagonistic, was characterized by a harmony the more grateful because hardly hoped for. The immediate practical results, besides the more general one of diffusing much useful information, were the formation of the National Wool-growers' Association, and the appointment of an Executive Committee from that Association to meet the Executive Committee of this Association, at the St. Nicholas Hotel, in New York, to agree as to the representations to be jointly made to the Revenue Commission.

The further "transactions of the Association," in its relations with the wool-growers, the United-States Revenue Commission, and the National Congress, are recited in the Report of the Executive Committee, presented at the last meeting of the Government. These proceedings are so important, that it is deemed proper to present the record without abridgment in this Report.

Report of the Executive Committee.

The undersigned, members of the Executive Committee of the National Association of Wool-manufacturers, have the honor to report their action since the Government meeting of Jan. 16, 1866, at which meeting a Report of their proceedings up to that time was submitted.

Your Executive Committee met the Executive Committee of the National Wool-growers' Association, in the city of New York, on the 17th of January last; and on the 9th of February, in conjunction with the last-named Committee, agreed upon and submitted to the member of the Revenue Commission specially intrusted with the consideration of questions of revenue applicable to wool and woollens, the Joint Report, copies of which have been furnished to members of the Association.

Your Committee desire to place upon record the steps by which they arrived at the conclusions embodied in the Joint Report. They entered into the conference, with no disposition upon their part to disturb the provisions of the existing tariff in relation to manufactures of wool; and, at the outset, they distinctly declared, that the manufacturers would not propose any changes in the existing tariff, so long as the premium on gold continues. But, early in the conference, it was demonstrated to your Committee, that their assent to the imposition of increased duties on wool would be an indispensable condition of any arrangement with the wool-growers.

Your Committee were prepared to concede a moderate increase of the duties on wool, and submitted the following propositions as a basis for the revision of the tariff:—

Proposition of the Executive Committee of the National Association of Wool-manufacturers to the Executive Committee of the National Wool-growers' Association.

Jan. 23, 1866.

1st, A provision, to be inserted in the tariff law, requiring all wools known as Metz wools, Mestiza wools, and Cape wools, to pay a duty of not less than six cents per pound; said provision to be so worded as to most effectually prevent these wools or similar wools, fraudulently invoiced, from being admitted at a less rate by any evasion of the law.

A provision to be also inserted, in the absence of treaty stipulations for trade and commerce with Canada, that all Canadian wools shall be subjected to a duty of six cents per pound.

2d, The present duties on wools, including the results of the foregoing provisions, to be raised twenty-five per cent.

The duties on woollen and worsted goods, and upon goods of which wool shall be a component material, to be raised twenty per cent.

Signed by the Secretary, In behalf of Committee.

The duty on competing wool, under this proposition, would have been about 7½ cents per pound. This proposition the Executive Committee of wool-growers peremptorily declined, alleging, as a reason, that the duties on wool would be altogether inadequate for their protection.

After rejecting this proposition, the Committee of the wool-growers represented, with great firmness, that nothing less would satisfy them and their constituents than such an arrangement of the tariff as would place upon foreign wools, competing with the American, a duty of not less than ten cents specific, and an ad valorem duty of 10 per cent; making the whole duty nearly twelve cents. To this your Committee replied, that no such proposition could be considered for a moment, except upon the basis that a corresponding specific duty should be given at the same time to the manufacturer; and that the responsibility of this great increase of duty upon manufactured goods must be borne by the wool-growers, for whose benefit this increase would be required. Your Committee, however, did not consider themselves justified in consenting to a final arrangement, even upon that basis; and proposed an adjournment, that they might confer with their constituents.

After consultation with such manufacturers as were accessible, — at full meetings called in Boston, Hartford, &c., at which the demands of the wool-growers were fully explained; and the importance of establishing an alliance with the agricultural interests, and the advantages which would result from stimulating the production of American wools, were fully considered, — your Committee resolved to yield their assent to the increase of duties upon wool, upon the condition that there should be an adequate increase in the duties on manufactures. It is proper to add, that not a single manufacturer consulted dissented from the course resolved upon by the Committee.

The demands of the wool-growers at this time suggested to the

Committee, that an opportunity had arrived for doing much more than making a present and temporary adjustment of duties; namely, the obtaining from the wool-growers of the country the recognition of a principle which should render the manufacturer at all times independent of the duties on wool; which should place him practically in the same position as if he had his wool free of duty; and which should finally dispose of all questions between the two interests, and establish a truly American policy in our national legislation respecting the woollen interest as a whole. This principle - already incorporated in our tariff laws, but hardly understood, and never before fully recognized, by the wool-producing interest — is, that, whatever may be the duties on the raw material, the manufacturer, besides receiving proper protection for his industry, is to be reimbursed by a sufficient duty for the whole amount paid for the duties on wool, and the expenses of carrying such duties. After full discussion in the session of the Joint Committees, the soundness of this principle was fully and frankly conceded by the Executive Committee of the wool-growers. Two propositions were therefore recommended in the Joint Report, as a basis for the re-adjustment of the tariff upon wool and woollens: one proposing for an increase of the duties upon wools competing with those of American growth; and the other proposing, that all manufactures, composed wholly or in part of wool or worsted, shall be subjected to a duty which shall be equal to twenty-five per cent net, — that is to say, twenty-five per cent, after reimbursing the amount paid on account of duties on wool, dyestuffs, and other imported materials used in such manufactures; and also the amount paid for the internal revenue tax imposed on manufactures, and upon the supplies and materials used The general principles only, upon which the re-adjustment of the duties on wool and woollens should be based, having been agreed upon in the Joint Report, the duty still remained to the Committee of recommending the provisions of a bill framed in conformity with these principles. For the purpose of obtaining the necessary information, representatives from all the branches of the woollen and worsted manufacture were invited to assemble in the office of the Association; and, from the facts laboriously collected, they were fully informed, as they believe, as to the position and necessities of those interests. With this information in their possession, and enlightened by the advice earnestly sought for from experienced manufacturers, the Committee had further interviews, at Philadelphia and Washington, with the Executive Com-

mittee of the wool-growers, and the member of the Revenue Commission in charge of these questions. At these interviews, the proposed bills in relation to wool and manufactures of wool, in substance the same which have passed the House, were matured and assented to by both Committees and the Revenue Commission; and a statement of the Executive Committee of the National Association of Wool-manufacturers, relative to proposed duties on wool and woollens, was prepared and submitted. A report was submitted to Congress by the member of the Revenue Commission having this matter in charge, recommending the passage of the bill in relation to wool and manufactures of wool and worsted, matured and assented to by the two Committees; and endorsing the principles of the Joint Report, and the views presented in the statement. The eminent political philosopher, whose long life has been spent in the study of questions of industrial science, Hon. Stephen Colwell, the member of the Revenue Commission in charge of this subject, thus speaks of the labors of the two Committees in his Report to the Secretary of the Treasury (see Reports of the U. S. Rev. Com., 1865-6, p. 352): —

"The attention of the writer, as one of the Revenue Commission, has been turned to this important branch of national industry since the commencement of his duties. Believing that the amount of internal revenue demanded by the state of our finances could not be realized without vigorous and proper action of the laboring classes, and that such continuous movement could not be maintained unless all the sources of domestic employment were opened and duly supported, the classes directly interested were invited to a full interchange of views. It is known, that, during the rise of the manufacture of wool in Great Britain, a want of harmony existed between the wool-growers and woollen manufacturers, which not a little retarded the progress of their industry, lessened their influence with the Government, and damaged their interests in other respects. A similar want of harmony and good intelligence was exercising a like injurious influence here.

"As nothing can be more certain than that the industrial interests of these two classes in the United States are substantially identical, it was a principal object to have the fullest possible interchange of opinion between them. Upon the first intimation of the wishes of the Commission, the necessary conferences commenced, and continued for more than six months, without much pause, by conventions and separate and joint committees; in which the various interests of each class, and the

united interests of both, were subjected to a scrutiny so patient, so intelligent, and so discriminating, that the utmost deference and weight is due, and should be awarded, to conclusions so carefully prepared.

"Joint meetings were held in Syracuse, in the city of New York, in Philadelphia, and in Washington.

"As the carefully prepared opinions and statements of these committees will form a portion of this Report, it is not proper here to anticipate what is so well stated by them. It was assumed as a point of departure, that growing wool and increasing flocks of sheep were of national importance with reference to clothing, food, and the general interests of agriculture. The experience of many countries had verified this. But, at the price of labor now ruling, and certain to prevail here in time to come, wool cannot be exported hence to Europe or elsewhere with profit. That, on this account, as well as upon the consideration that the use of mutton as food did not present a sufficient inducement to sheep husbandry, it was evident that wool grown here must be manufactured here, as a necessary encouragement to the increase of sheep. It was considered, that, as a branch of national agriculture, few could be of more importance, on account of the vast extent of public lands, for which it would increase the demand, and because sheep husbandry tends constantly to the improvement of the soils where it is extensively pursued. It being admitted, on these public grounds, that wool should be one of the great staples of the country, it followed that the manufacture of wool should be one of the principal branches of domestic industry. These two employments would soon furnish for domestic consumption woollen fabrics to the value of not less than three hundred millions of dollars, an amount nearly equal to our foreign trade, involving necessarily a vast capital, and full occupation, with a livelihood, for a large population.

"The revenue to be derived from such a mass of wealth and production cannot be overlooked in any estimate of the capacity of the country to carry its financial burdens.

"In the conferences between the wool-growers and the manufacturers, it was conceded by the former, that their business could not flourish unless the latter were fully established and sustained; that capitalists would not invest adequate sums in buildings and machinery, without good prospect of profit and permanency in the business; that without permanency, the needful skill and experience in the operatives could not be maintained; that, taking into view the price of labor in Europe, and the price of labor and of wool here, the manufacture of woollens could not be established here in competition, unless some favor on public ground could be accorded to the manufacturer; and both parties insisted, that the importance of the industry in every point of view, besides its magnitude, made the claim for favorable legislation valid. It was shown by ample proof, that wool could not be grown here, unless the manufacturers of wool could be permanently established; and that the consumption of woollens could never reach the adequate figure of ten dollars per head of the increasing population, unless wool-growing and the manufacture of wool both take their place among the established and successful industries of the country.

"The manufacturers claimed, that, until similar wools shall be supplied at home, a considerable proportion of the fine, but inferior and very cheap wools of South America, Africa, and other countries, would be required to give variety, special qualities, and cheapness to certain descriptions of their woollen goods; but did not resist the claim of the wool-growers, to have such a duty imposed on these wools as would encourage their growth, and in time supply their place, at least in part, by home-grown wool.

"The manufacturers, on their part, claimed, as these cheap wools entered English ports free of duty, and as the cost of labor entering into the production of woollen goods in Europe was less than half the rates paid in this country, that such duties should be asked of our Government as would place them in fair competition with foreign manufacturers in our own market.

"The details of the statements to be made through the Revenue Commission to Congress were, as will be seen, carefully considered and mutually approved, in the hope of their being incorporated into the revenue laws.

"Although harmony of views between parties whose interest, so far as concerned the intervention of Government, appeared to be improbable, yet with patient and protracted efforts of those most interested, with much study and candid examination of facts, it was accomplished; and now it may be hoped, that other interests, supposed to be conflicting, can, with even less trouble, be brought to full accord. Other differences, apparently as formidable and mischievous, will disappear before earnestness, intelligence, and patience. The duty of seeking such results rests with those whose minute knowledge of facts and details enables them, by comparison of views, to ascertain a basis on

which their interests can be secured, whilst general advantage is promoted. Instead of wasting labor in opposing their respective views, let a well-directed effort be made in the various departments of industry to ascertain a common basis on which such an industrial policy could be gradually shaped as time and experience would show to be at once wise as public policy and favorable to industrial enterprise. There is every reason why this attempt should be made among those specially concerned in the various departments of labor, by confronting those whose interests are regarded as adverse. It is enough for the public authorities, upon full consideration of what private parties have in this manner stated, conceded, proved, and suggested, to determine what should receive the sanction of legislation, and become a national policy, to be relied upon as established and permanent."

It may be added, that the Reports and statements made to the United-States Revenue Commission, and growing out of the conferences of the two Committees, constitute over one-third of the volume of the Report of the Commission, of which five thousand copies were printed by order of Congress; thus extending a knowledge of the woollen interest, and giving it a national importance never before estimated.

The prolonged absence in Europe of the Chairman of your Committee, and the President of our Association, Mr. Erastus B. Bigelow, allows to the undersigned the privilege of offering a grateful tribute to his labors in this cause. For six months, Mr. Bigelow gave himself unremittingly to the great work, whose importance few so well appreciated, of establishing our industry upon the stable foundation of a harmony between the agricultural and manufacturing interests. To the rare combination, united in him, of a profound knowledge of the principles of political economy, with minute practical experience as a manufacturer; to his patient and lucid illustrations by figures and tables, to his conciliatory address, and to the influence of his high personal character, — we must mainly attribute the happy results of the conference so warmly commended in the Report just cited.

The more important labors devolving upon the Committee were terminated upon the transmission of their Reports and statements to the Revenue Commission. There remained the duty of presenting the proposed bills to the Committee of Ways and Means, and to Congress. This duty the Committee intrusted to their Secretary, who had taken a part in all the preceding conferences, and in preparing the various Reports and statements. Mr. Kingsbury was associated with the

Secretary a portion of the time. The action of Congress, in relation to our interests, is stated in the following Report of the Secretary:—

Boston, Aug. 29, 1866.

To the Executive Committee of the National Association of Wool Manufacturers.

GENTLEMEN, - I have the honor to submit a Report of the legislative action in Washington relating to the interests of our Association. In conformity with your instructions, I proceeded to Washington in June last, where I was soon joined by Mr. Kingsbury of your Com-We immediately placed ourselves in communication with the Revenue Commission, the agents of other interests who were urging the modification of the tariff, and the Chairman of the Committee of Not finding that hearty concurrence with our Ways and Means. views which we had anticipated on the part of the eminent Chairman of the Committee of Ways and Means, and finding that the full expositions which the Committee had given, in their printed Reports, of the relations of wool and woollens, had not been thoroughly studied by members of the Committee of Ways and Means, we asked the privilege of making a formal statement of our position to the Committee, in full session. This privilege was accorded; and, at an unusually full meeting of the Committee, oral statements were made by us, illustrated by diagrams and specimens of fabrics, explaining in detail the provisions of the proposed tariff bill on manufactures of wool. These explanations satisfied the Committee as to the soundness of the general principles of the proposed bill. The Committee, however, upon consultation, informed us that they were not prepared to adopt the full amount of the specific duties on woollens proposed in the draft of the bill submitted by the Executive Committee; and intimated that they should report the specific duty upon woollen cloths at 46 cents, instead of 53 cents, as proposed by the manufacturers. Believing, as we did, that a compromise upon this point would be indispensable, it was deemed advisable that I should proceed to Boston to consult with leading manufacturers upon this point, leaving Mr. Kingsbury to act upon my communications with him. The manufacturers consulted having agreed to accept a specific duty of 50 cents, Mr. Kingsbury was notified to this effect by telegraph; and, upon conference with Mr. Morrill, obtained his assent to his compromise. A bill was therefore reported by the Committee

of Ways and Means, conformable in the main to that proposed by the Executive Committee, with the exception that the specific duties were thus slightly reduced. From the period that the bill was reported until it came up in the House, the time was occupied in personal explanations to members. No agent of the wool-growers being present, facts and arguments in favor of increased duties on wool were supplied, even to the representatives of the wool-growing districts of the West. When the whole bill came up in the House, it was a matter of extreme gratification to observe the respect that was shown by members to the arrangement made between the wool-growers and wool-manufacturers; for the bill was understood to be in entire accordance with their agreements. When the wool and woollen sections of the general tariff bill were before the House, not a single objection was made, or unfriendly amendment offered; an acquiescence wholly unprecedented in legislation relative to this or any other industrial interest. The whole bill passed the House by an overwhelming vote; and it was universally conceded, that the bill was carried mainly through the popularity of the wool and woollen sections. It is unnecessary to say that the general tariff bill was postponed in the Senate until next December; but it is important to observe, that the Senators most influential in effecting the postponement have distinctly admitted that their opposition had no reference to the sections relating to wool and woollens.

The postponement of the bill in the Senate, by votes of Senators known to be generally favorable to a protective policy, was undoubtedly due to national considerations believed to be more important than any industrial necessities, and to an indisposition to give the labor supposed to be required for the examination of the bill, during the hot weather, at the close of a protracted session.

The only legislation completed, affecting our interests, was the passage of the "Bill to Protect the Revenue, and for other purposes," requiring the addition of charges in estimating the value of imported goods; the effect of which is to bring some of the lowest-priced wools into classes paying higher duties. As this section would operate very injuriously in respect to the manufacturers of carpets, — no increase of duty on carpet-wools being required, as they do not compete with American wools, while the duties on carpets were not relatively increased, — and as the spirit of the agreement between the wool-growers and manufacturers required that all legislation respecting wool and

woollens should be in the form mutually agreed upon, I deemed it my duty to exert such influence as I possessed against the passage of This section was struck out in the Senate, but was this section. restored in the Committee of Conference, solely through the influence of the wool-growing interest. This measure, however, will in all probability be but temporary, as the bill which has passed the House, and is before the Senate, provides expressly that the duties are to be exclusive of charges. The hardships in the operations of the bill respecting charges, and the imperfection of its provisions, show that no just legislation in respect to the wool or woollen interests can be effected without consultation and agreement between the two parties affected by it. After the postponement of the general tariff bill in the Senate, a demonstration was made in the House, which threatened no little injury to our interests. Mr. Bingham of Ohio, possessing great influence from his parliamentary experience and ability, by leave introduced a bill "to provide for revenue from duties on wool, and for other purposes." This bill was an exact copy of the sections, relating to wool and manufactures of wool, of the bill which had passed the House, with the exceptions that the duties on wool were placed at 10 cents and 11 per cent, instead of 10 cents and 10 per cent; and that the manufacturers' rates were in many respects reduced, the specific duty on cloths, &c., being reduced from 50 cents to 40 cents; the scale of minimums lowered; and the duties on certain carpets ruinously reduced. Having learned the provisions of the proposed bill, I was so fortunate as to obtain an interview with Mr. Bingham. Upon my explanation to him of the disastrous effect of the bill proposed, upon our industry, and indirectly upon the wool-growing industry by diminishing the market for its products, Mr. Bingham made the honorable concession of pledging himself to introduce amendments in the House, restoring the manufacturers' duties, in conformity with the general tariff bill which passed the House. It was understood, thereupon, that our friends in the House should withdraw all opposition to Mr. Bingham's bill. The bill came up in the House on the last day but one of the session, and was passed by an overwhelming vote; the representatives from New England, and, I need not say, the special representative of our Association, being no less active in behalf of the measure than the representatives of the West. Thus the pledges made between the East and the West, between the wool-manufacturers and wool-growers, were a second time most honorably redeemed by their representatives. An earnest effort was made to pass Mr. Bingham's bill in the Senate; but, it having reached that body only on the last day of the session, and there being no time to consider its provisions, it was almost necessarily postponed.

Respectfully, your obedient servant,

JOHN L. HAYES, Secretary.

Your Committee conceive, that there is nothing in the action of Congress, as above reported, which will justify the Association in changing the position so positively assumed in respect to the tariff policy. The question of the tariff is still pending in Congress. The obligations growing out of the agreements of the two Executive Committees will be binding until the question is finally disposed of. The Association is committed to the policy of the bills which have passed the House, by the agreement of its Committee, by the publication of its documents, and by the votes of the Members of Congress which it has solicited. If the Association is to maintain respect as the organ of the wool-manufacturers, it must stand firm in the position which it has deliberately assumed. If any change is to be made in the tariff policy respecting wool and woollens, the initiative must come from the wool-growers. No intimation on their part has been given of a desire for such change. Your Committee therefore do not hesitate to recommend, that the whole influence of the Association be exerted to procure the passage, by the Senate, of the sections relative to wool and manufactures of wool which have twice passed the House. They further recommend that the Association should favor the passage of Mr. Bingham's bill, providing for wool and woollens alone, only in the event of the failure of the general tariff bill. The Committee regard the interests of the wool manufacture as identified with the prosperity of all the industrial interests of the country; and they would not separate themselves from other interests in asking protective legislation, except as a last measure of self-preservation.

Respectfully submitted,

T. V. FAXTON,
J. WILEY EDMANDS,
THEO. POMEROY,
N. KINGSBURY,

Members of
Executive
Committee
present.

At the meeting of the Government, held in the city of New York, on the 18th of September, at which the above Report was presented and unanimously adopted, the Hon. David A. Wells, the United-States Revenue Commissioner, the former Commission having expired, was present by invitation, in pursuance of a desire expressed by him to communicate with the woolmanufacturers of the country. Mr. Wells presented the views as to tariff legislation which have been substantially given in the late published instructions of the Secretary of the Treasury, at the same time expressing his interest in the promotion of our special industry, while in harmony with the general interests of the country; and his reluctance to disturb any arrangements matured by the wisdom and experience of those most directly informed as to their own interests. But no resolution was adopted by the Government conflicting with the views expressed, or policy recommended, in the Report above presented; the action of the Committee having been endorsed by a unanimous vote of approbation.

In reviewing the transactions of the Association for the last year, we are relieved from exhibiting a large part of the labors of our institution, as they have been detailed in the various publications issued by the Association, and familiar to its members.

These publications are an Address of the Secretary on "The National Importance of the Wool Manufacture, and the Means of Developing it," a pamphlet of 80 pages.

"Report of the Proceedings of the Convention of Delegates from the National Association of Wool-manufacturers, and from the several organizations of the Wool-growers of the United States, at Syracuse, N.Y.," a pamphlet of 90 pages.

"Joint Report of the Executive Committee of the National Association of Wool-manufacturers, and of the Executive Committee of the National Wool-growers' Association, addressed to the United-States Revenue Commission, Feb. 9, 1866." 23 pages.

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- "Statement of Facts relative to Canada Wools, and the Manufactures of Worsted." 21 pages.
- "The Carpet Manufacture. A statement of facts addressed to the United-States Revenue Commission." 9 pages.
- "Statement of the Executive Committee of the National Association of Wool-manufacturers, relative to Proposed Duties on Wool and Woollens, with Explanatory Key, addressed to the United-States Revenue Commission." 42 pages.
- "Letter exhibiting the Condition and Necessities of the Knit-goods Manufacture, addressed to Hon. Justin S. Morrill." 19 pages.
- "The Provision and Grain-growing Interests, as affected by the Repeal of the British Corn Laws, and the American System of Protection." Quarto pamphlet. 13 pages.

The last two were only partially prepared and published under the auspices of the Association.

All these publications, comprising two hundred and seventy-five pages, have been stereotyped, and printed in such a manner as to give dignity to the subjects presented. Few purely literary institutions, and probably no industrial bodies, have done more in the diffusion of useful knowledge within so short a period.

The importance of the work accomplished, in making these permanent records of our labors, will be appreciated, when it is remembered, that, before these publications, no authoritative published statements were in existence in relation to our industry in this country; and that, of all the information furnished to Congress and the Departments, as data for the various tariff bills which have been enacted, no record is left, except some fugitive and inaccessible pamphlets.

Although the Association cannot congratulate itself upon any accomplished legislation favorable to its interests, it may contemplate with satisfaction some general results of no little importance.

1st, It has established the relations of manufacturers among themselves.

The intercourse at their meetings of the members of the Government, the representative men of all the wool-manufacturing districts of the country, and of the different branches of manufactures, has given opportunities for comparing views, giving information of new improvements, and maturing plans for the general advancement of the woollen manufacture. While all combinations for fixing prices and controlling markets have been most carefully avoided, the sentiment that all are united in a common cause has been strengthened, the disposition to monopolize improvements has been checked, a more generous competition encouraged, and the standard of excellence in manufacture elevated. In these results we are reminded of the guilds of the middle ages, which effected for the industrial arts what the art of printing did for letters.* In the councils which led to the recommendation of the proposed tariff on woollens, which in substance has passed the House, still more was done in fixing the just relations of the manufacturers among themselves. In all former tariff bills, the inequality of the provisions, as affecting different branches of our industry, has been a matter of just complaint, as in the cases of knit and worsted goods under the existing tariff. In the preparation of the bill proposed by the Executive Committee, all the manufacturers accessible in each of the different branches of the woollen and worsted production were successively invited to meet for consultation at the office of the Association; and a sufficient time was devoted to each branch to enable its repre-

The guilds representing the different branches of the woollen manufacture were among the most powerful, especially in Italy. In an address delivered by the Secretary at the first annual meeting of the Association, reference was made to our own industry as the source of the commerce and wealth whose fruits survive in the wonders of Florentine art. I cannot refrain from citing, in further illustration of the historical fact thus asserted, a circumstance supplied by Mr. Grimm in his recent "Life of Michael Angelo." The colossal statue of David, the first great work of the immortal sculptor, was executed by order of the consuls of the wool-weavers' guild, and munificently paid for by them. The "David" has now stood for centuries at the gate of the dark and powerful palace where it was placed by the master. It is still regarded by the Florentines as the good genius of their city, and as a memorial of its most splendid epoch in wealth and art.

sentatives to exhibit its condition and necessities, with a fulness and minuteness which would have been impossible before a committee of Congress. The effect of this comparison was to reduce rather than increase the demands of the separate interests. The principle was adopted, that each branch, with the exception of those just struggling into existence, should claim simply a protection of twenty-five per cent, after reimbursing the amount paid on account of duties on materials used in manufacture, and the internal revenue on manufactures; and a bill was matured, satisfactory to all interests, bearing as lightly as possible on consumers, even diminishing slightly the protection under the existing tariff, and providing for those interests which had been subjected to heavy charges by the repeal of the Reciprocity Treaty, and imposing duties on Canada wools, - yet of a simplicity truly surprising, taking in view the vast and various interests comprised in its provisions.

2d. The Association has established friendly relations with the wool-growers of the United States. The hostility between the two interests supplying and manipulating the raw material of our manufacture, which had been gaining strength for fifty years, had assumed the phase of sectional animosity between the West and the East. On the one hand, the West, representing the wool-growing interest, exaggerated the profits of the Eastern manufacturer; claimed that it bore, without consideration, the burden of duties which sustained these profits; ignored the fact that the specific duties on foreign goods competing with our own were but the equivalents for duties on the raw material which the wool-grower received; and demanded that miscalled equality of duties so obnoxious under the horizontal tariff of 1846. The manufacturers, on the other hand, were becoming more and more disposed to look abroad for the chief supply of raw material. They were not unwilling to avail themselves of such commercial practices as would diminish the duties intended to be given for the protection of

the American wool-grower; and were inclined to advocate the British policy of free trade in raw material, including wool, as the wisest system of protection to our manufacturers. They overlooked the fact, which they have since acknowledged with returning magnanimity, that "it has been the experience of all nations, that the domestic supply of raw material has been the first and always the chief dependence of its manufacturers," and "that American wools are eminently the foundation of the prosperity of our own manufactures." They failed also to consider, that, while aiming at the largest and cheapest supply of foreign wool, they would render American sheep-husbandry unprofitable, and inevitably destroy domestic production, thus reducing themselves to a sole dependence upon sources liable at any moment to be cut off by foreign wars and political or social revolutions, or to be affected by foreign legislation, such as the export duties now threatened by the Argentine Republic, over which they have no influence. The inevitable result of such diverging views must have been perpetual strife and instability, or legislative action which, favoring either interest exclusively, would alternately ruin both. Such evils could not have been averted by the efforts of individuals, however well disposed, and by no organizations less powerful than the National Associations of American wool-manufacturers and woolgrowers. The feud which threatened to be so fatal has been happily reconciled by the conferences of the Executive Committees of these Associations, and the alliance cemented by labors in a common cause at Washington. No more faithful or intelligent advocates of a just protection of manufacturing interests can be found than among the Western wool-growers and their representatives in Congress, who have been instructed by our views, and conciliated by our concessions: while the manufacturers reciprocate, by cheerfully offering to bear the heavy burden of a double duty on wool, that thereby there may be a full and permanent supply of raw material at home; that the West, no less than the East, may partake of the benefits of protecting labor, and that the markets for goods may be enlarged by the prosperity of consumers.

3d, The Association has established relations between the manufacturers and the National Government.

Our heavy national debt renders the business of the country more than ever dependent upon governmental action. A business of over a hundred and twenty million dollars per annum must be seriously affected by any re-adjustment of a tariff for revenue merely; and it is a duty of imperative necessity, and one which we need not scruple to proclaim openly, that we should watch vigilantly that our interests do not suffer by careless or hostile legislation. Congress, with all its wisdom, has not the power of intuition, and must be furnished with information in order to legislate intelligently. Individual manufacturers, however, cannot advocate even general interests without incurring suspicion of partiality for the special industries which they pursue. The national relations are so vast, and political questions so absorbing, that committees have not time to listen to merely personal representations. Facts must be digested and views matured by organizations apart from the seat of Government, and be presented by an authoritative body to receive hearing and respect. The legislation of England, upon commercial questions, is largely controlled by such organ-The Bradford Chamber of Commerce, an institution corresponding nearly to our own, occupies itself directly and actively in giving shape to the provisions of treaties with foreign nations — the modern English system of protection affecting the woollen and worsted trade. It is regularly consulted by the Foreign Office with reference to all negotiations concerning trade; and, in its annual report for 1865, it exults that in that single year it took part in the framing of treaties relative to the Russian, Prussian, Italian, Zollverein, and Austrian tariffs. It is hardly to be doubted, that it is employing itself less openly, but not less actively, in relation to the pending tariff in this country.

The Association may regard with satisfaction the consideration which its representatives have received from the Committee of Ways and Means, the Treasury Department, the Revenue Commission, and Members of Congress. As an illustration of the relations established with the Government, I may refer to the fact, that the Association has been consulted by the Quartermaster-General as to the strains required for army goods. The subject was submitted to a Special Committee; and, as we are unofficially informed, the system recommended by the Committee has been adopted by the Quartermaster-General.

Occasions will be constantly arising for the exercise of its influence. If the proposed tariff legislation in relation to our interests should not be consummated, or should fail in checking foreign competition, the essential condition of our prosperity, the efforts of the Association must be directed to diminishing or throwing off altogether, the oppressive burden of the internal revenue taxation. The internal revenue tax, paid in the year 1865 upon "woollen fabrics and all manufactures of wool," amounted to \$7,947,094, being 3.79 per cent upon the whole of the internal revenue collected. How heavily this tax bears upon our manufactures, is shown by facts presented in the Report of the Secretary of the State of Massachusetts, upon the industrial statistics of the State, for the year 1865. The capital invested in woollens proper is shown to have been \$14,775,830, and the value of the woollen product to have been \$48,430,671. Six per cent upon the latter sum, the amount of the revenue tax, is \$2,905,846, being 19.66 per cent, or, in round numbers, 20 per cent upon the capital invested in This tax has been paid cheerfully, under the impulses of patriotism. But it cannot be borne long. In the language of one of the Special Reports of the Revenue Commission, "It has no parallel, probably, in the fiscal regulations of any civilized nation. It would utterly destroy in ten years two-thirds of the various kinds of production subject to its

operation." It is quite remarkable how the views of the Commission are supported by the facts above cited in relation to the woollen manufactures of Massachusetts. The Revenue Report continues, "A very large proportion of the manufacturing establishments in the United States sell products, yearly. to two or three times the amount of their invested capital; and, in many departments of production, their sales yearly amount to more than three times the cost of their establishments. If the capital invested be one hundred thousand dollars, the sales may amount to two or three hundred thousand dollars, and the tax on that business will range from twelve to eighteen thousand dollars; that is, from twelve to eighteen per cent on the cost of the manufacturing establishment:" and it adds, "In every point of view in which it is presented, it seems clear that the six per cent tax upon manufactures will destroy productive power in an increasing progression, that will in a few years, if not removed, furnish a sad monument to perpetuate the memory of a great mistake."

No action has been taken, thus far, to relieve this oppressive burden; and the subject is referred to merely to illustrate the labors which may hereafter devolve upon the Association, in common with other industrial organizations, in its relations with the National Government.

It remains for me only to speak of the present condition of the Association. And first, as to the actual working of our plan of organization. The most important feature of our system of administration,—that of giving the power of direction to a Government consisting of sufficient members fully to represent all sections of the country, and each branch of our varied industry; and of still further concentrating responsibility by an Executive Committee,—it is believed could not be improved. The Association cannot too highly appreciate the disinterestedness and fidelity of the members of the Government, who, at their own personal charge, have borne the expenses of considerable journeys, and the more important expenditure of

valuable time, to attend the meetings of the Government, and have not suffered a single meeting to take place without a prompt and full attendance. The Association, although representing the majority, and the most important of the woollen and worsted establishments in the United States, is not imposing in numerical strength. It comprises at present two hundred and sixty members, fifty-two having been added during the last year. The usefulness of the institution is limited only by its members. It is for each present member to see, that other manufacturers, who enjoy most of its benefits, shall contribute to its support. It is believed that the smallness of our number is due more to our indifference as to soliciting membership than to any indisposition on the part of outside manufacturers to share our burdens. If each present member will secure one or more accessions from the woolmanufacturing firms and woollen mills of the country, the Association will gain more stability and influence. dustrial associations are being formed upon the model of our The public sentiment of the country, rejoicing in any influence which nourishes the national self-reliance, regards such associations with much favor. Prince Gortschakoff, the Premier of Russia, in a speech recently called forth by a tribute of respect offered by Congress to his illustrious sovereign, and by an exhibition of American excellence in naval architecture, referring to his own nation and the United States, says, "God has given to the two countries such conditions of existence, that their grand internal life is enough for them." Such associations serve to develop our "grand internal life;" to make us independent of other nations in industry as in politics; and to raise us to that exalted position pointed out by our resources, and rendered possible by our institutions.

Respectfully submitted,

JOHN L. HAYES, Secretary.

WAYS AND MEANS. TABLES EXHIBITED TO COMMITTEE OF

Data for proposed Duties on Woollens, founded on the following proposition agreed upon by the Executive Committees of Wool Growers and Manufacturers. 2. All manufactures composed wholly or in part of wool or worsted shall be subjected to a duty which shall be equal to twenty-five per cent after reimbursing the amount paid on account of duties on wool, dye-stuffs, and other imported materials used in such manufactures, and also the amount paid for the internal revenue tax imposed on manufactures, and upon the supplies and material used therefor.

TABLE NO. ONE.

4 lbs. Mestiza Wool to 1 lb. finished Cloth.

Cassimeres manufactured, 77,320 yds. Wool consumed per yard, 32.4 ozs. Weight per yard, 8.2 ozs.
Doeskins manufactured, 79,606; yds. Wool consumed per yard, 31.1 ozs. Weight per yard, 8.2 ozs.

Tariff of 1861.

Duty on Wool, 3 cents x 4 = 12 cents specific duty per pound of Cloth; ad valorem duty 25 per cent.

Tariff of 1864.

Duty on Wool, 6 cents x 4 = 24 cents specific duty; ad valorem duty 40 to 45 per cent.

Proposed Turiff.

Ad valorem duty on Wool per pound if cents, whole duty Duty on Wool 10 cents specific, 10 per cent ad valorem. Average price Mestiza Wool, 16 cents per pound.

Proposed specific duty on cloth, per pound, 53 cents. Proposed ad valorem duty, 35 per cent.	Basis of Specific Duty on Dress Goods and Italian Cloths. Wool part 16 yards, 22 inches wide, or 10 square yards
Wool duty paid on 1 pound of cloth is 11½ x 4 = 46 cts. Duty on Drugs, &c., per pound of cloth	delanues, weighs 1 lb. Wool duty 53 cents requires 5 ₁₅ cents per square yard; proposed specific duty 6 cents. Wool part 6 ₁₅ yards, 32 inches wide, or 5 ₁₆ yards Italian cloths, weighs 1 lb. Wool duty 53 cents requires 9 ₁₆ cents per square yard; proposed specific duty 8 cents.
Interest 6 mos. at 7 per cent 3 per cent. Commissions and guaranties 6 , , , 4.85 cts. Total compensatory duty required 58.35 ,,	They on Cloth of suit of closing the suit of closing yards. sinceres, 69.98 ozs. d, \$7.02 16. 1.44 186
Below 40 cents	Charges on duties

TRANSACTIONS

OF THE

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The Fleece and the Loom: an Address before the National Association of Wool-manufacturers at the first annual meeting in Philadelphia, Sept. 6, 1865, by John L. Hayes, Secretary, with Secretary's Report and Tables.

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STATEMENT

OF THE

EXECUTIVE COMMITTEE OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

RELATIVE TO

PROPOSED DUTIES ON WOOL AND WOOLLENS,

WITH EXPLANATORY KEY,

ADDRESSED TO

The United-States Mebenue Commission.

MAY, 1866

 $${\rm BO\,S\,T\,O\,N}_{\odot}$$ PRESS OF JOHN WILSON AND SONS, 1866,



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BOSTON:
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WAYS AND MEANS. TABLES EXHIBITED TO COMMITTEE OF

Data for proposed Duties on Woollens, founded on the following proposition agreed upon by the Executive Committees of Wood Growers and Manufacturers. 2. All manufactures composed wholly or in part of wool or worsted shall be subjected to a duty which shall be equal to twenty-five per cent net; that is to say, twenty-five per cent after reimburding the amount paid on account of duties on wool, dye-stuffs, and other imported materials used in such manufactures, and also the amount paid for the internal revenue tax imposed on manufactures, and upon the supplies and material used therefor.

TABLE NO. ONE.

4 lbs. Mestiza Wool to 1 lb. finished Cloth.

Cassimeres manufactured, 77,320 yds. Wool consumed per yard, 32.4 ozs. Weight per yard, 8.2 ozs. Doeskins manufactured, 79,606 yds. Wool consumed per yard, 31.1 ozs. Weight per yard, 8.2 ozs.

Tariff of 1861.

Duty on Wool, 3 cents x 4-12 cents specific duty per pound of Cloth; ad valorem duty 25 per cent.

Tariff of 1864.

Duty on Wool, 6 cents x 4 = 24 cents specific duty; ad valorem duty 40 to 45 per cent.

Proposed Turiff.

Duty on Wool 10 cents specific, 10 per cent ad valorem.

Average price Mestiza Wool, 15 cents per pound.

Ad valorem duty on Wool per pound 14 cents, whole duty 114 cente.

Table No. Two. Basis of proposed ad valorem duty, 35 per cent; 25 per cent net duty required for protection of manufacturer, 10 per cent duty required for 5 per cent Internal Revenue tax.	Data for Determining above. Average weight 10 samples foreign cassimeres, 9.33 ozs. Average cost abroad, 93.70 cents. Custom duties, 51.47 cents.	To cost abroad		Add present home value 168.10 180.33	5 per cent on above for Internal Revenue tax . 9.01 10 per cent on foreign cost 9.30 Difference
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Wool	Iroposed ad Valorem duty, 30 per cent.
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1866.

try, and a sufficient supply of the strong and sound domestic wools would be invaluable to the manufacturer. The rapidity with which the production of wool can be increased by favoring circumstances has been illustrated during the last five years, the annual production having increased within that period from sixty to ninety-five millions of pounds. The manufacturers, therefore, admit that it is for their interest and the public benefit, that duties should be imposed upon wool sufficient to place the American producer upon equal terms with the foreign producer of wools competing with his own.

The manufacturer is enabled to make this concession, by the incorporation into our recent tariff laws of a principle which aims to make him independent of the duties on the raw material. This principle is, that, whatever may be the duties upon wool, the manufacturer, in addition to the usual duties for revenue and protection, is to be placed in the same position as if he had his wools free of duty. This principle has been adopted as a fundamental one, to enable the American manufacturer to contend with his foreign rival, who has his wool free of duty. This principle involves also a necessary re-adjustment of the tariff on woollens, whenever a change is made in the duties upon This principle was first incorporated in our tariff laws by the present Chairman of the Committee of Ways and Means, Mr. Morrill. It was contained in the bill known as the Morrill Tariff Bill, and continued in the provisions of the tariff bill of 1864, respecting wool and woollens.

The "joint report" of the wool growers and manufacturers says, in relation to these provisions:—

"The object sought in these bills was to give a sufficient protection to the wool-grower, and place the manufacturer in the same position as if he had his wool free of duty, — a duty supposed to be sufficient to protect the wool-grower against wool competing with his own was placed upon such wools; and such a specific duty was placed upon woollen cloths, as was supposed to be sufficient to re-im-

burse the manufacturer for the amount of the duty paid on the wools. The ad valorem duty on the cloths was added to re-imburse to the manufacturer the expenses of carrying the duty on the wools, the internal taxes, the duties on drugs and other materials used in manufacture, and to furnish the required protection."

The correctness of these principles is fully recognized in the "joint report" of the wool growers and manufacturers.

It will be instructive to exhibit in some detail the manner in which this principle of placing the manufacturer in the same position as if he had his wool free of duty was applied in the tariff bills of 1861 and 1864.

In framing the tariff of 1861, it was admitted that the wools coming into competition with the American woolgrower, or displacing American fine wools in the manufacture of cloth, were a class of wools costing, at that time, in 1861, from eighteen to twenty-four cents per pound, these wools consisting principally of the class known as Mestiza and Cape wools. The tariff acts of 1861, with the object of affecting the Mestiza and Cape wools, provided that, "On all wools unmanufactured, the value whereof at the last port or place from whence exported to the United States exceeding eighteen cents and not exceeding twenty-four cents per pound, there should be levied, paid, and collected a duty of three cents per pound."

It was the concurrent testimony of experienced manufacturers, that four pounds of Mestiza wool, of the class coming within the prices designated, and paying a duty of three cents per pound, are required to make a pound of finished cloth. That all doubt might be removed as to the correctness of this statement, which furnishes the most essential element for calculating the amount of duties required for woollen cloths, the Committee have sought to obtain memoranda of actual experiments made without reference to any discussion of tariff questions. They have obtained from the books of the "Proctorville Woollen

Mill," situated in the State of Vermont, a statement of the semi-annual production of cloth, the consumption of wool in making such cloth, and the weight of each yard of cloth manufactured. From this statement, it appears that certain lots of cloth made in that mill from the first day of January, 1865, to the last day of June, inclusive, — to wit, six months, — and from the first day of July, 1865, to the last day of December, 1865, were manufactured wholly from Mestiza wool. The accounts of the mill show that there were manufactured in the mill, wholly from Mestiza wool, in the first six months, 77,320 yards of black cassimeres; that $32\frac{4}{10}$ ounces of wool, as purchased in the market, were consumed in the manufacture of each yard of said 77,320 yards of cloth; and that the average weight per yard of the cloth was 812 ounces, or, in other words, $32\frac{4}{10}$ ounces of wool were required to make $8\frac{2}{10}$ ounces of finished cloth. The accounts of the mill show, that in the last six months there were manufactured, wholly from Mestiza wool, 79,606 yards of black doeskins; that the average weight of said doeskins was 8_{10}^2 ounces per yard; and that 31_{10}^{1} ounces of wool were required to make 8_{10}^{2} ounces of such cloth.

The fact, then admitted, and since so fully corroborated, that four pounds of wool, paying a duty of three cents per pound, are required to make a pound of cloth, formed the basis of the tariff upon woollens in the bill of 1861. The main provision in that bill, in respect to woollen goods, was, that there should be levied, collected, and paid the following duty: "On woollen cloths, woollen shawls, and all manufactures of wool of every description, made wholly or in part of wool, not otherwise provided for, a duty of twelve cents per pound, and, in addition thereto, twenty-five per cent ad valorem." This provision included the mass of woollens manufactured in this country, and all those manufactured from the class of wool referred to, competing with American wool. Three cents, the duty

upon this wool, multiplied by four, the number of pounds of wool in a pound of finished cloth, make twelve cents. A specific duty of twelve cents was, therefore, first given to the manufacturer, as the precise amount (with the exception of charges to be hereafter reverted to) necessary to re-imburse the duties he would have to pay for the protection of the wool-grower before he could take the first step to convert the wool into cloth. By receiving this specific duty, he was simply placed in the same position as if he had his wool free. The specific duty involved, therefore, not one cent of protection to the manufacturer. The sole provision for his benefit being contained in the clause giving him, in addition to the specific duty, an ad valorem duty of twenty-five per cent.

Notwithstanding the impulse given to the whole woollen interest of the United States by the passage of the tariff bill of 1861, it was found, in practical operation, that the duty on wool was placed too low to enable the American to contend upon equal terms with the foreign wool-grower. The duties on wool were therefore re-adjusted by the tariff bill of 1864, the one now in operation.

That bill was framed with the intention, that the class of wools before mentioned, competing with American wools, which, under the bill of 1861, paid a duty of three cents per pound, should pay a duty of six cents per pound, the duty being doubled. The main provisions of this bill respecting wool were: first, that there should be levied on "all wool unmanufactured, the value whereof at the last port or place from whence exported to the United States, exclusive of charges in such ports, shall be twelve cents or less per pound, three cents per pound;" this provision being intended to apply wholly to the coarse long wools which do not compete with our own. Secondly, that the duty should be upon all wools "exceeding twelve cents per pound, and not exceeding twenty-four cents per pound, six cents per pound;" this provision being intended

to apply to the washed coarse wools, and also to the wools before named competing with our own and forming the mass of the foreign wools used in the American manufacture of woollen cloths. To preserve the principle adopted in 1861, it became necessary to increase the specific duty to be given to the manufacturer. Four pounds of such wools entering into a pound of cloth, - and six cents, the duty, multiplied by four being twenty-four cents, - that sum was fixed as the specific duty to be given to the manufacturer, to re-imburse him for the duty which he pays for the benefit of the wool-grower. The ad valorem duty, provided for the protection of the manufacturer, was raised from twentyfive to forty and forty-five per cent. The increase in the ad valorem duty was made upon the ground, that the manufacturer was compelled to pay, besides the duty on wool, duties upon dyestuffs and other imported materials used in manufacturing, ranging from two to three cents per pound of cloth, and also the expenses of carrying these duties; and it was further contemplated, that, by the provisions of the revenue bill under consideration at the same time with the tariff bill, that the manufacturer would have imposed upon him an onerous revenue tax not previously provided for. And it was estimated, that, when the neutralizing duties upon dyestuffs, the expenses of carrying the duties, and the revenue taxes, should be deducted from the forty and forty-five per cent, the manufacturer would not, in fact. receive a greater protection than under the tariff of 1861.

The doctrine has thus been distinctly recognized by the legislation of Congress, that the manufacturer is to be fully re-imbursed the duties imposed upon his raw materials, in addition to the usual duties for revenue and protection.

This is in substance the principle recognized in the proposition of the "joint report" in relation to manufacturers; and it involves the proposition before asserted, that a change in the duties on wool requires a re-adustment of the duties on manufactures of wool. A material change

in the duties on wool is now demanded by the wool-growers of the United States. The most essential change proposed by the wool-growers, and assented to by the manufacturers, is the imposition of a minimum duty of ten cents per pound, and ten per cent ad radorem, upon all clothing wools, or the wools which enter into the composition of woollen cloths, shawls, flannels, blankets, knit goods, and the great bulk of the woollen manufactures of the country, with the exception of carpets and worsted goods. From statements furnished by importers of wool, it appears that the average price of Mestiza wools, which are the principal competing wools, may safely be taken to be fifteen cents per pound. The ad valorem duty upon this price would be $1\frac{1}{4}$ cents, and the whole duty would be $11\frac{1}{4}$ cents.

The provisions proposed by the Committee, and rendered necessary by the proposed change in the duties on wool, aim to accomplish two objects: first, to fix the specific duties at rates which shall be simply compensatory for the duties on the wool and other material; and, secondly, to establish an ad valorem duty which, besides providing for the revenue tax on manufactures, shall leave the manufacturer simply a net protection of twenty-five per cent. With some exceptions, the reasons for which will be specially explained hereafter, the ad valorem duty on manufactures of wool and worsted is fixed at thirty-five per cent, ten per cent being fixed as an equivalent for the internalrevenue tax of six per cent on manufactures and on articles consumed in manufacturing, and twenty-five per cent as protection to the manufacturer. That ten per cent is not more than an equivalent for the six per cent revenue tax will appear from considering that, the customs duty being levied on the foreign value and the internal tax on the home value, a larger percentage of the former than of the latter will be required to make a given sum.*

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The provisions proposed by the Committee, and rendered necessary by the proposed change in the duties on wool, aim to accomplish two objects: first, to fix the specific duties at rates which shall be simply compensatory for the duties on the wool and other material; and, secondly, to establish an ad valorem duty which, besides providing for the revenue tax on manufactures, shall leave the manufacturer simply a net protection of twenty-five per cent. With some exceptions, the reasons for which will be specially explained hereafter, the ad valorem duty on manufactures of wool and worsted is fixed at thirty-five per cent, ten per cent being fixed as an equivalent for the internalrevenue tax of six per cent on manufactures and on articles consumed in manufacturing, and twenty-five per cent as protection to the manufacturer. That ten per cent is not more than an equivalent for the six per cent revenue tax will appear from considering that, the customs duty being levied on the foreign value and the internal tax on the home value, a larger percentage of the former than of the latter will be required to make a given sum.*

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To state a case for illustration, quite closely conformable to present home and foreign values: A yard of cloth sells in our market for \$2.50, which would cost abroad only \$1.50. In that case, exactly ten per cent customs duty would be required on the latter sum, to equal the six per cent internal tax on the former. In the case stated, the ten per cent would not be a full equivalent for the whole internal-revenue tax, as such taxes must also be paid upon articles consumed in manufacturing.

To determine the amount of re-imbursing specific duties which the manufacturer should receive as an equivalent for the proposed increased duty on wool, we must, in the first place, apply the rule adopted in the present and preceding tariff bills, and multiply the proposed duty on the wool, 112 cents, by four, the number of pounds of wool to a pound of finished cloth, which would give 46 cents. this should be added the duties upon drugs, dyestuffs, and other imported materials, although these are provided for, in the present tariff, under the ad valorem clause. These duties are estimated, from authentic data, at an average of 21 cents to a pound of cloth, making the whole direct duty on the raw material 481 cents. But the manufacturers are subject not only to this duty directly, but to charges and expenses in consequence of the duty. Six months at least must elapse from the time of paying the duty on the raw material, before payment is received for his finished goods. He is, therefore, entitled to interest for six months upon the amount of the whole duty upon the raw material, which, at seven per cent, the average rate of interest, would be 31 per cent. He is also subject to charges for commissions on sales and guarantees, which commissions are increased in amount in proportion to the amount of the duty. The average rate of these commis-

amount of the six per cent tax on their home value, as may be seen by reference to the annexed Key, page 37.

sions, as determined by reliable statements, is $6\frac{1}{2}$ per cent. The two items of interest and commissions on sales and guarantees together amount to ten per cent, which, upon the whole duty, is $4\frac{85}{100}$ cents, which sum should be added to the direct duty on the raw material to fully re-imburse him.

The elements of the specific duties on woollen cloths and woollens would be as follows:—

In the proposed tariff on woollen manufactures, the Committee have placed the specific duty on "woolfen cloths, woollen shawls, and all manufactures, made wholly or in part of wool, not otherwise provided for," at 53 cents per pound, the specific duty on the same goods being 24 cents under the present tariff. Nothing less than a specific duty of 53 cents per pound on such manufactures will be sufficient to place the manufacturer in the same position as if he had his raw material free of duty, - a position which he must demand as an imperative necessity for the preservation of his industry. The Committee do not hesitate to affirm, that, independently of considerations of general public policy, demanding a duty on wool, the woolmanufacturers of this country would prefer the total abolition of the specific duties, provided they could have all their raw material duty free, and an actual net protection of twenty-five per cent.

It will be observed, that no provision is made, in the tariff bill proposed, for the admission of the class of goods under consideration, at lower duties in proportion to the diminution of the foreign cost, as provided in other portions

of the bill. The minimum principle has been expressly excluded from woollen cloths, for the purpose of shutting out those made of shoddy, mungo, and waste. Cloths costing less than 80 cents per pound must be made to a greater or less extent of these materials. Fabrics which the consumer cannot ordinarily distinguish from cloths composed of sound wool are made, containing as much as eighty per cent of these substitutes for wool. These goods, if admitted at moderate duties, would take the place of our sound cloths; and the American manufacturer would be compelled to reduce the price of his cloths by fabricating them of the same worthless material, or surrender the business to the foreigner. By the provisions of the bill on wools, recommended by the Executive Committee of the Wool Growers, a duty of twelve cents per pound is to be placed upon shoddy, mungo, and waste, in lieu of the present duty of three cents. The American manufacturer will thus have but little inducement to adulterate his cloths, if so disposed. It is but justice to the American manufacturer, and for the benefit of the wool grower and consumer, that equally stringent duties should exist against shoddy cloths. If cheap cloths should be admitted under low duties, this country would be inundated by the wretched fabrics of Batley, twenty-five thousand workmen in England being employed in converting shoddy and mungo into cloths of an annual value of thirty million dollars, and consuming sixty-five million pounds of these materials, - more than our whole clip of wool in 1860. American wool would have no competitor so formidable, if the barriers against shoddy goods existing in high specific duties should be removed.

The proposed bill next provides that the duty shall be as follows:—

"On flannels, blankets, endless belts, or felts for paper or printing machines, hats of wool, kuit goods, balmorals, woollen and worsted yarns, and all manufactures of every description, composed

wholly or in part of worsted, the hair of the goat, alpaca, or other like animals, except such as are composed in part of wool, not otherwise provided for, valued at not exceeding forty cents per pound, twenty-five cents per pound; valued at above forty cents per pound, and not exceeding sixty cents per pound, thirty-five cents per pound; valued at above sixty cents per pound, and not exceeding eighty cents per pound, forty-five cents per pound; valued at above eighty cents per pound, fifty-three cents per pound; and, in addition thereto, upon all the above-named articles, thirty-five per cent ad valorem."

The system of minimums, or a series of the lowest valuations to which certain specific duties can be applied to given ranges of goods, is proposed for the articles above enumerated, for the purpose of adjusting the specific duties, as nearly as is practicable, to the proportions of wool paying the increased duties which the enumerated articles may contain, in order that the specific duties on the goods may be merely compensatory for the duties on the wool. While this system could not be adopted for cloths, for the reasons before given, there are no such objections to its application to the last enumerated articles, as, within the valuations mentioned, shoddy, mungo, and waste will not enter into their fabrication. The highest minimum is fixed at eighty cents per pound; flannels, blankets, hats of wool, and knit goods costing above this value, must be composed of clothing wool, paying a specific duty of 111 cents per pound, and requiring four pounds to a pound of finished goods. It is clear that the re-imbursing specific duty upon these goods should be fifty-three cents, at which they are fixed in the proposed bill. It is considered that cotton, or wool paying less duty, will enter somewhat into the composition of the woollen goods costing less than eighty cents per pound and more than sixty cents; therefore, a lower specific duty; viz., forty-five cents, is given to these goods. As the valuation diminishes, it is supposed the proportions of cotton, or wool

paying the lowest duty, increase, and the specific duties are proportionally diminished. The lowest minimum is fixed at forty cents per pound. In the tariff at present in operation, the lowest minimum on blankets is fixed at twenty-eight cents per pound. The exclusion of this minimum is advocated as a necessity for the blanket industry of this country. England possesses a great advantage in competing with the American manufacture of blankets in commanding the waste of her worsted wool. English blankets costing less than forty cents per pound are composed of this material, while lower grades are composed of shoddy from coarse woollens, waste cotton, and jute. A high minimum for the exclusion of these worthless goods will benefit the consumer no less than the manufacturer, as the American manufacturer will be restricted in the use of shoddy and waste by the high duties proposed on those articles.

The objection is made to the system of minimums, that they are unequal in their operation between the different points of valuation, and that they afford a temptation to the importer to invoice goods at a lower price than those of the class to which they properly belong. To meet the latter objection, it is necessary to fix the valuations sufficiently high to give the limitation intended. This system, upon the whole, is the only one which can be devised to meet the object earnestly sought for in the proposed tariff, - the adjusting of specific duties on woollen manufactures approximately to the duties paid on the raw material. operation is illustrated in the case of blankets. The highest-priced American blankets, being made of clothing wool. will have the highest specific duty. The lower-priced blankets, being composed more or less of wool paying the lower duty, will have correspondingly diminished specific duties, while those with warps of coarse wool, and filling of fine wool paying a higher duty, will pay the intermediate rates.

It is believed that the provisions under consideration operate more equitably than those of the present tariff in respect to a most important and rapidly developing industry, that of knit goods. Under the present tariff, the duty on shirts, drawers, and hosiery of wool, or of which wool shall be a component material, not otherwise provided for, is fixed at twenty cents a pound, and in addition thirty per cent ad valorem; the specific duty being four cents and the ad valorem duty being ten per cent less than upon woollen cloths. The wool which enters into a majority of these goods is fine American fleece, and, if wholly composed of wool, they would be clearly entitled to the same duty as woollen cloths. A large class of knit goods, including the fancy hosiery, a rapidly advancing and peculiarly American industry, furnishing goods of great beauty and taste, and consuming the most expensive aniline dyes, is made wholly of American clothing wool. These goods, which would cost more than eighty cents per pound, would bear under the bill proposed a specific duty of fifty-three cents, and the same ad valorem duty as is provided for other goods. Another class of knit goods has a portion of cotton, which is introduced to prevent shrinkage. would be impracticable to separate the goods composed wholly of wool from those partially composed of cotton, by placing a less duty on the latter, as all foreign competing goods, whatever their value, would have some cotton placed in them to bring them within the lower duty. distinction is sufficiently provided for by the minimum scale of duties. It is desirable that the specific duties on the knit goods should be sufficiently ample to secure full compensation, as the waste in hosiery goods from cutting, trimming, and fitting, is greater than in other woollen fabrics, while there is a large consumption of trimmings, such as bindings, tape, spool-cotton, silk, buttons, linen thread, &c., on which duties are paid. The industry of knit goods is entitled to special consideration from the national importance which it has already attained. The number of sets of machinery employed upon this class of goods is estimated by a Committee of the National Association of Knit Goods Manufacturers at 400. The number of hands employed — men, women and children — is estimated at 19,000. The aggregate amount of wages paid is set down at \$3,000,000 per annum: the amount of wool consumed at 6,500,000 pounds per annum. The production of the 400 sets is estimated at \$19,200,000 per annum, paying a revenue tax of \$1,152,000.

Worsted yarn, and manufactures composed wholly or in part of worsted, are provided for in the section of the proposed bill now under consideration, with certain manufactures of wool, no distinction being made in the specific duty proposed. It is admitted, that, in proposing the same specific duties for worsted as for woollen goods, the specific duties on the worsted manufactures will be more than compensatory for the duties on the wool of which they are composed, as two pounds of Canada combing or worsted wool are required to make a pound of worsted goods. A portion of the specific duty on worsteds will, therefore, be protective to the manufacturer, as shown by the following statement:—

The duties on Canada combing-wool, of which worsteds are made, as provided in the proposed tariff on wool, will be, at 45 cents per pound, the present average price of Canada wool, 12 cents specific, and 10 per cent ad valorem, or $16\frac{1}{2}$ cents per pound. Two pounds of wool being required for a pound of worsted goods, the amount of duty on the wool for a pound of worsted goods, paid by the manufacturer, will be 33 cents. To this is to be added 10 per cent for charges on the duty, as before explained, making $36\frac{8}{10}$ cents as the sum the manufacturer would require to re-imburse the duties on the wool. The specific duty proposed on worsted goods, valued at over eighty cents per pound, is 53 cents; deducting from this sum

 36_{10}^{3} cents, there would remain 16_{10}^{7} cents per pound as protective above the compensatory duty. The amount of the protection afforded by the specific duty would very from eight to fifteen per cent, according to the character and value of the goods; but, added to the net ad valorem, protection would be in some cases less, and in no case more, than the amount of net protection under which the present worsted manufacture was called into existence.

This exception to the general policy of the bill proposed is advocated on grounds of public expediency, and would appear to be vindicated by the peculiar conditions and necessities of the worsted manufacturers in this country. The recent extraordinary development of the worsted manufacture in this country is due to two causes: the command of long-combing wools of Canada, free of duty under the Reciprocity Treaty, such wools being used almost exclusively, to the extent of about four millions of pounds annually; and the duty under the Morrill Tariff of 50 per cent, the whole of which, after deducting the duties on dyestuffs and the revenue tax, was operative as a protection, and was peculiarly effective during the war. Under this stimulus, the worsted manufacture, which has grown up almost wholly within six years, now supplies yarns, braids, hosiery, alpaca fabrics, and curtain stuffs of such excellence as to equal the English manufactures, the yearly value attained being not less than ten millions of dollars. With the high duty now operating upon Canada wools, the manufacturers have already largely succumbed; and it is evident that even a compensatory duty on the wool will not sustain the industry, unless the whole amount of net protection originally afforded under the present tariff is continued: no more is now asked for. The same measure of protection afforded to well-established industries, like those of woollen goods, cannot be sufficient for an interest just struggling into existence. It has been the established policy of this, as well as of all other industrial nations, to

give ample protection to manufactures in their infancy. That the fostering influence of the Government is still imperatively demanded by this interest, so hopefully commenced and now checked so disastrously, will be apparent from the following passages from a report of a committee appointed to represent the present condition and necessities of this manufacture:—

"The manufacture of worsted yarns and braids, &c, has come into existence during the past four or five years, but mostly during the past two or three. We estimate that there are now forty establishments in the business, representing a capital of from four to five million dollars, and employing five or six thousand hands.

"These concerns are not large corporations on the scale of many cotton and woollen companies, existing previously to the war, but mainly small mills with moderate assets and quick capital, and especially dependent upon close economy and attention for success. These small mills are introducing into the country in the best way the worsted manufacture, educating workmen, and gaining experience for the future growth of this manufacture in all the varieties now flourishing in England and Germany.

"Nearly all the permanent investments in factories and machinery have been made during the highest range of rates of gold and exchange, most of the expensive combing and spinning machinery having been imported. Having no existence before the war, it is impossible to compare this manufacture with others whose history and conditions are totally different, and whose mills, machinery, and experience have been paid for before with gold at par. In consequence of starting a new business with a lack of skilled workmen, and under high prices, we believe that up to this time the worsted business has not averaged a profit of five per cent upon the capital employed, less in fact than the Government has received from it through the internal-revenue tax, while some have lost largely."

The encouragement of the worsted manufacture is further recommended by considerations of public policy, such as its relations to agricultural interests in developing the culture of the long-wool and mutton sheep, so important to the agricultural wealth of England. Without enlarging upon this topic, the Committee beg to refer to the accompanying "statement of facts relative to Canada wools and the manufactures of worsted" for full details illustrative of the national importance of this industry.

The proposed bill next provides that the following duty shall be levied and collected:—

"On women's and children's dress goods and Italian cloths, composed wholly or in part of wool, worsted, the hair of the alpaca goat, or other like animals, valued at not exceeding twenty cents per square yard, six cents per square yard, and in addition thereto, thirty-five per cent ad valorem; valued at above twenty cents the square yard, eight cents per square yard, and, in addition thereto, forty-five per cent ad valorem; provided that, on all goods weighing four ounces and over per square yard, the duties shall be fifty-three cents per pound, and, in addition thereto, thirty-five per cent ad valorem."

The provision for goods not exceeding twenty cents per square yard has express reference to such as compete with delaines,—a most important and characteristic branch of our manufactures, and consuming the fleece of the American merino, the sheep at present most in favor with the wool-growers of this country. The price of all the wool in delaines will be affected by the proposed change of duties on wools. Delaine fabrics require, therefore, a compensatory specific duty of 53 cents per pound. The specific duty of six cents is closely adjusted to effect this compensation.

The wool part of sixteen running yards of a cotton warp delaine, 22 inches wide, weighs one pound, which is equivalent to one pound for 10 square yards; 53 cents, the duty on a pound of wool, is equal to $5\frac{3}{10}$ cents per square yard, which sum would be exactly compensatory for the duty on the wool. To this must be added the duty on drugs and other imported materials, and the proposed duty

on cotton, which would be more than $\frac{7}{10}$ cents. The duty of six cents per square yard proposed will be scarcely sufficient to re-imburse the amount paid for duties and charges on all the materials. The ad valorem duty proposed is the same as on woollen goods. Delaines constitute at present the great bulk of the stuff goods manufactured in this country; and it will be perceived that the duty proposed for them is in exact conformity with the principle agreed upon in the "joint report."

The provision as to dress goods, valued at above twenty cents the square yard, relates to alpacas, some Italian cloth, coburgs, merinos, and similar stuff fabrics, involving great skill and much labor in their fabrication. Some of these fabrics, such as coburgs, are made of the finest American merino fleece and Mestiza wool, to which the 53 cents specific duty should be applied. Others, as the alpacas and Italian cloths — the latter fabric extensively used for linings, and for making which extensive machinery has been very recently put in operation - are made of It would be impossible, in fixing the spe-Canada wools. cific duties on these goods, to apply strictly the rule adopted for delaines and woollen goods. The duties, both specific and ad valorem, applied to the articles now under consideration, have been determined after deliberate consultation with those engaged in making these goods, with reference to the absolute necessities of the manufacture. marks made generally in relation to the necessity of encouraging the worsted manufactures, apply with peculiar force to these special manufactures. These manufactures, so auspiciously commenced, and opening the most promising of the undeveloped fields of American textile industry, employing in England and France more capital and labor than all other branches of the woollen interest, will inevitably die out, unless favored by national legislation.

The proviso in relation to all goods weighing four ounces and over per square yard is inserted to prevent

cloakings and heavy goods, which should pay duty as cloth, coming in at a less duty as dress goods, because adapted to women's and children's wear.

It is unnecessary to urge the propriety of placing the same specific duty on ready-made clothing as on cloth, as the maker of such clothing will be compelled to pay the whole amount of the increased duty on cloth consequent upon the duty on clothing wools. A higher ad valorem duty upon clothing is recommended from considerations of public policy not directly affecting the manufacturer of cloth. The proposed ad valorem rate on ready-made clothing is ten per cent higher than that upon cloth. The higher rate is recommended by the increased labor in that manufacture, by the great loss of material in cutting and fitting, and more especially by the consideration that ample protection of this industry is necessary to afford employment to the needy sewing women in the large towns and cities, who depend chiefly upon this industry for their subsistence.

The provisions in relation to carpets, comprising the only remaining portions of the proposed bill to be considered, are as follows:—

"On Aubusson and Axminster carpets, and carpets woven whole for rooms, fifty per cent ad valorem; on Saxony, Wilton and Tournay velvet carpets, wrought by the Jacquard machine, seventy-five cents per square yard, and, in addition thereto, thirty-five per cent ad valorem; on Brussels carpets wrought by the Jacquard machine, forty-eight cents per square yard, and, in addition thereto, thirty-five per cent ad valorem; on patent velvet, and tapestry-velvet carpets, printed on the warp or otherwise, forty-four cents per square yard, and, in addition thereto, thirty-five per cent ad valorem; on tapestry-Brussels carpets, printed on the warp or otherwise, thirty cents per square yard, and, in addition thereto, thirty-five per cent ad valorem; on treble ingrain, three-ply, and worsted chain Venitian carpets, nineteen cents per square yard, and, in addition thereto, thirty-five per cent ad valorem; on yarn Venitian, and two-ply ingrain carpets,

fourteen cents per square yard, and, in addition thereto, thirty-five per cent ad valorem; on druggets and bockings, printed, colored, or otherwise, twenty-five cents per square yard; on hemp or jute carpeting, six and a half cents per square yard; on carpets and carpeting of wool, flax, or cotton, or parts of either, or other material, not otherwise specified, forty per cent ad valorem; provided that mats, rugs, screens, covers, hassocks, bed sides, and other portions of carpets or carpeting, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description, and that the duty on all other mats, screens, hassocks, and rugs, shall be forty-five per cent ad valorem; on oil-cloths for floors, stamped, painted, or printed, valued at fifty cents or less per square yard, per cent ad valorem; valued at over fifty cents per square yard, and on all other oil-cloth, except silk oil-cloth, per cent ad valorem."

The position of the carpet manufacture under the present revenue laws is fully set forth in a "statement of facts addressed to the United States Revenue Commission," early in January last, by the representatives of five of our large carpet-manufacturing companies, a copy of which is herewith transmitted. This statement, made under oath, was prepared with great care from the books of the companies represented, and may be relied upon as strictly accurate. It shows that with gold at par, and with the present "advance in wages and expenses consequent upon the war," this branch of manufacture receives an average net protection of less than seven and a half per cent. Excluding from the table on page sixth of the statement just referred to, the item of "advance in wages and expenses," which is more or less contingent upon the financial condition of the country, even then, on the basis of cost which existed before the war, the percentage of present protection does not exceed sixteen per cent. The proposed duty on Canada wool will reduce this percentage still lower on fine carpets; for one fifth part, at least, of the worsted required for tapestry Brussels, velvet, Jacquard

Brussels, and Wilton carpets, is necessarily made of that or similar wool; subject to pay a like duty. The duties on carpets, therefore, necessarily require revision, and they have been adjusted in the proposed bill on the same basis as the duties on woollen goods; that is to say, the specific duties per square yard have been fixed at rates which will scarcely countervail the amount to be paid on account of the duties on the material used, while the ad valorem rate is the only part of the duty which can be regarded as protective in any degree, and by which the internal revenue taxes are to be re-imbursed. The following table shows the amount of the neutralizing duties on the materials required for a running yard and for a square yard (the ingrains being a yard wide and all the others three-fourths of a yard wide) of each of the standard qualities of the principal varieties of carpets made in the United States, and the charges to which the manufacturer is subjected on account of such duties. By a comparison of the specific duties proposed upon carpets, in the draft of the bill submitted, with the totals of neutralizing duties and charges per square yard, as exhibited in the table, it will be seen that the specific duties proposed are in all cases less than such duties and charges.

TABLE showing the Amount of Duties and Charges on the Materials used in the Manufucture of a RUNNING Yard and a SQUARE of the leading Varieties of Carpets; the Fractions of Cents and of Ounces being expressed by Decimals.

ITEM8.	Ingrain Carpeta.	Carpeta.	Tapestry Carpets printed on the Warp.	pets printed Warp.	Carpets wrough!	Carpets wrought by the Jacquard Machine.
	Two-ply.	Three-ply.	Brussels.	Velvet.	Brussels.	Wilton.
Neutralizing duties and charges, riz.:— Duties on the wools used.	11.70 cts.	15.28 cts.	11.80 cts.	17.71 cts.	24.92 cts.	39.36 cts.
Duties on the linen or tow yarn.	•	•		8		
Duties on drugs and other imported materials	2 cts.	2.50 cts.	°	4.50 ,,		4 ,,
Totals of neutralizing duties	18 70 cts.	17.78 cts.	20.80 cts.	30.21 cts.	33.92 cts.	51.36 cts.
Charges on account of duties ten per cent †	1.37 "	1.77 "	2.08 "	8.03 ,,	8.39 ,,	6.18 "
Totals of neutralizing duties and charges per running yard	15.07 cts.	19.50 cts.	22.88 cts.	33.23 cts.	87.81 cts.	58.49 cts.
Totals of neutralizing duties and charges per equare yard	15.07 cts.	19.50 cts.	30.50 cts.	44.81 cts.	49.75 cts.	75.82 cts.

• The mode of computing these duties is explained in the annexed Key.

† The basis of the charges on account of duties on materials is explained on page 14.

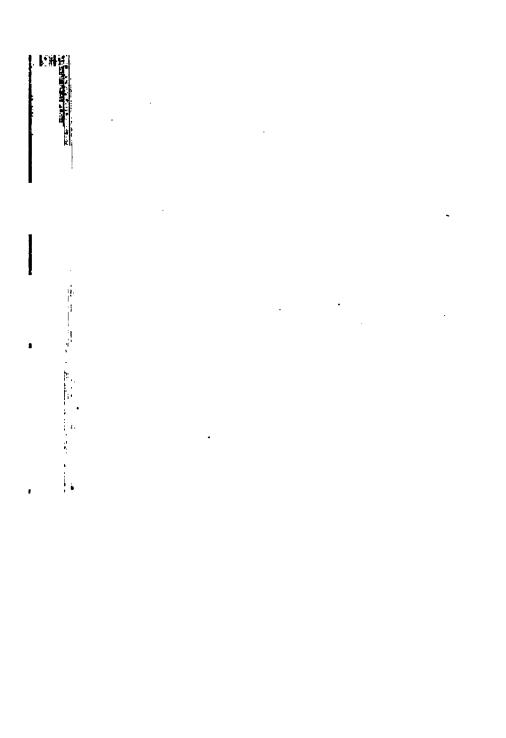
The Committee have not deemed it incumbent upon them, in the present communication, to discuss any general considerations relating to the tariff policy. have aimed only to show that the measures commended to the attention of the Commission contemplate, with the exceptions distinctly pointed out, simply a compensatory specific duty, and a net protection, barely sufficient to equalize the disparity in the rates of wages and interest on capital in favor of our foreign competitors. They would observe, in conclusion, that the duties imposed on manufactures should be ample, as, through evasions of the law, the full amount is rarely collected. In your report upon "the relations of foreign trade to domestic industry and internal revenue," you have shown the depressing effect which foreign trade, as now organized, is exerting upon American industry. You have shown that "the factories, workshops, and workmen are in Europe, while the warehouse is in New York;" that "goods intended for the warehouse are invoiced at the factory cost, and are entered at our custom-house at that price;" and that foreign "commercial parasites" co-operate in New York, "to debauch and mislead our officers, and nullify the laws pertaining to our commerce and industry." No class suffers more severely from these illicit attacks upon our industry than the wool-manufacturers of this country. dering of grossly fraudulent invoices is systematically practised and openly vindicated by the manufacturers of Germany, Austria, and France, who principally supply the foreign woollen goods consumed here. It is well known that goods cannot be purchased in the markets of those countries at the prices at which they are invoiced. Foreign factories are now running night and day to flood the United States with woollen goods, fraudulently invoiced, while our mills are being stopped and our workmen thrown out of employment. These are not the only disadvantages which the American manufacturer suffers. The surplus

stocks of foreign goods are thrown upon our markets irregularly, thus producing fluctuations of prices, and disturbing the steady pursuits of industry. The American manufacturer must contend, besides, against the unpatriotic prejudice in favor of foreign goods unhappily so prevalent among consumers, a prejudice persistently fostered by dealers, because they can obtain larger profits on the foreign article than on the domestic, the cost and quality of the former being less generally known than of Nothing less, therefore, than the full measure of protection asked for in the bill herein proposed can sustain the woollen industry in full vigor and active operation, and enable the American wool-growers and wool-manufacturers to perform their part in bringing our country to its maximum of wealth, power, and dignity; for, to use your own words, "no nation can maintain a real independence and suitable self-respect, make due progress in civilization, and attain accumulation of capital needful to progress in the useful arts, unless it produces its own food and clothing, builds its own houses, makes its own furniture, provides for defence by maintaining sufficient military and naval power, develops its own mines, and maintains a system of internal transportation and intercourse adequate to all the wants of its inhabitants, and unless by such means it affords employment to all its laborers, and full scope for all the mental and physical activities of its people."

We have the honor to be, very respectfully, your obedient servants,

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E. B. BIGELOW,
T. S. FAXTON,
EDWARD HARRIS,
J. WILEY EDMANDS,
N. KINGSBURY,
THEODORE POMEROY,
S. W. CATTELL,
JOHN L. HAYES, Secretary.
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EXPLANATORY KEY.

THE following Key or Appendix to "The Statement of the Executive Committee of the National Association of Wool Manufacturers, relative to proposed duties on wool and woollens," addressed to the United-States Revenue Commission, in April last, is intended to exhibit more in detail the data from which the amount of the neutralizing duties and taxes on the leading articles of woollen and worsted manufacture were derived; also the comparative amount and percentage of duties on the same articles under the present and proposed tariffs, distinguishing the proportion of the whole duty respectively paid on account of duty on wool, duties on other imported materials, the internal-revenue tax, and protection to the manufacturer. The reader of the following tables and memoranda will please bear in mind, that fractions of cents and of ounces are expressed by decimals.

To ascertain the actual position of the more important branches of the woollen manufacture under the present tariff, the Government of the "National Association of Wool Manufacturers," at a meeting held in the city of New York on the sixteenth day of January, 1866, appointed a committee to obtain fabrics for a foundation of a statement of the present amount of protection on American woollen goods, and gave the said committee the following instructions:—

1st. Get samples of fabrics which will be a fair representation of classes to which they belong, both foreign and American.

- 2d. Ascertain their weight per yard.
- 3d. Their price, or cost, in gold abroad.
- 4th. The amount of duty paid on said fabric.

In conformity with these instructions, the committee obtained samples of fancy cassimeres, black doeskins, and broadcloth, which have been preserved, and are herewith exhibited; of which samples the weight, cost, and present duty appear by the following tables, to wit:—

FANCY CASSIMERES.

```
Sample No. 1: weight, 7.25 oz.; cost, in gold, $0.95; duty, 48.87 cts.
        " 2
                                             1.00
                                                        52.00 ,,
                      7.50 ,,
                                             1.00
                                                        51.25
                                    ,,
                      5.50 "
                                                        26.25 "
                                              .45
                                 " "
                                        "
                                                    "
                                                                   Duty at 40 per
                                                        29.80 "
                                              .52
                                                                     cent ad m-
                                                        50.00 "
                                              .95
                                                                     lorem,
                                                                            and
                                                                     24 cents per
                     R
                                                        52.00 "
                                             1.00
                                                        72.50 "
                                                                     pound.
                    15
                                             1.25
                    14
                                             1.15
                                                        67.00
                     14
                                             1.10
                                                        65.00
    Average weight,
                     9.88 "
                                            98.70 c.,
                                                        51.47 cts.
```

BLACK DOESKINS.

```
Sample No. 1: weight, 8.50 oz.; cost, in gold, $1.12; duty, 57.55 cts.
                      8.50 "
                                                     " 88.75 "
                                                     ,, 40.00 ,,
                                              .70
                                 97
                                    "
                                                       53.50 ,,
                                             1.00
                                 17 17
                      8.50 "
                                             1.05
                                                       54.75 "
                                 79 79
                                                                   Rate of duty
                      8.50 "
                                                       47.55 "
                                              .87
                                                                     as above.
                                                       35.65 ,,
                      7.50
                                              .61
                                              .90
                                                        48.00
                     10
                                             1.12
                                                        59.80
                     8.50 "
                                            89.10 c. "
    Average weight,
```

BROADCLOTH.

Sample No. 1: weight, 16 oz.; cost, in gold, \$1.75; duty, 94 cents.

These samples having been examined by members of the Association present, comprising many of the best-



informed manufacturers of woollens in the United States, were pronounced to fairly represent the goods of the classes to which they belong, imported into and manufactured and consumed in the United States. From the preceding data the following Table A was then constructed, which table furnishes the basis for the construction of the succeeding Table B, showing the operation of the present and proposed tariffs on manufactures of wool as affecting the consumer.

Amount of the Custom Duties remaining as Protection, after deducting the Neutralizing Duties, Taxes, &c.; and the Percentage of the same TABLE showing the Foreign Cost of a RUNNING YARD of Cassineres, Black Dosskins, and Broadcloths; the Amount of Custom Duties imposed thereon; the Amount of the Neutralizing Duties and Tazes, and of the Adrance in Wayes and Expenses consequent upon the War; the on their Foreign Cost; the Fractions of Cents and of Ounces being expressed by Decimals.

ITEMS.	Cassimeros	Black Dosakina.	Broadelotha
Average weight per yard	9.33 oz. 93.70 cents. 51.47 "	8.50 oz. 89.10 cents. 48.39 ,,	16 oz. 175 cents. 94 "
Neutralizing Duties, Taxes, dc., rtz.:— Custom duties on the wools used other materials Internal-revenue tax on manufactured goods t. Advance in wages and expenses consequent upon the war f.	18.99 cents. 1.46 " 10.12 " 16.38 "	12.75 cents. 1.83 " 9.62 " 14.77 "	24. cents. 2.50 " 18.90 " 28. "
Totals of neutralizing duties, &c	41.90 cents.	38.47 cents.	78.40 cents.
Deducting said totals from said duties, there remains as protection per yard Which, on the foreign cost, is only	9.57 cents. 10.21 per cent.	9.92 cents. 11.13 per cent.	20.60 cents. 11.77 per cent.

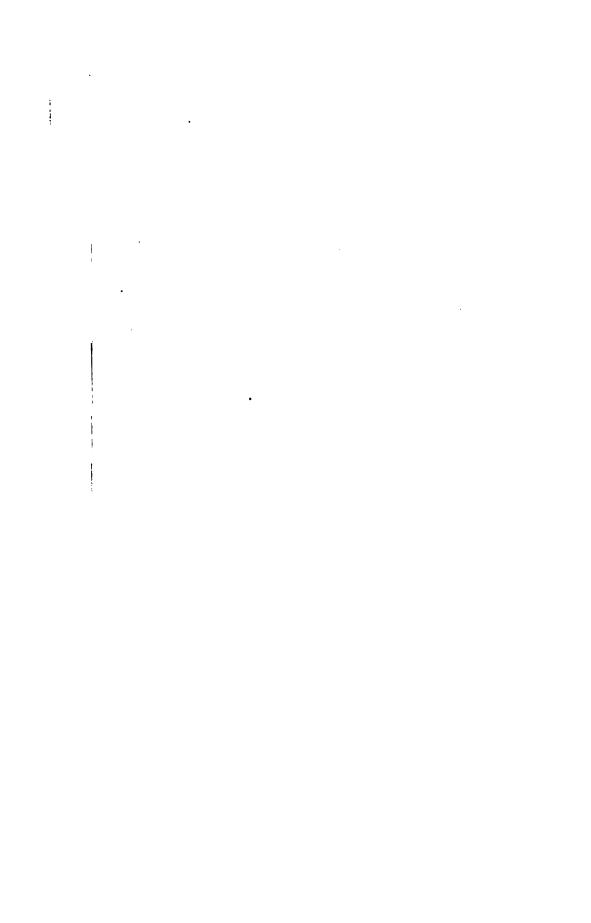
† In fixing the value of the articles, for the purpose of estimating the amount of this tax, it is assumed that the value of the home article will not hill . The statements in this table, including the valuation of the articles on which the internal tax is computed, are based on gold at par.

below the cost in gold of importing a similar article; and as the present duty and expenses of importation amount to ahout 80 per cent on the foreign cost of the goods, the fursign cost of the goods, with 80 per cent added, is taken to be the proper valuation of the articles for taxation.

† This item embraces the advance in wages, the internal taxes on domestic materials used in manufacturing and in repairs, the increased cost of transportation, and the increase of State taxes and other expenses consequent upon the war-

Table showing f the whole Duty respectively paid on Account of the Duty on the the Increase of Duty under the Proposed Tariff.

_	_			II .									
	Proi	POSED TAR	UFF.	INCREA	INCREASE OF DUTY UNDER PROPOSED TARIFF,								
Specif	mts. Cents.		Total.	Percentage of In- crease on Foreign Cost of Wool.	Percentage of In- crease on Foreign Cost of Manufac- ture.	Total Amount of Increase.	Difference in the protection of the protection o						
One yard of ave			Cents. 63.70	Per cent. 36.66	Per cent.	Cents. 12.23							
A suit of clothe pantaloons,			477.75	36.66	13.05	91.73							
One yard of ave	28	20.71	59.34	36.66	12.29	10.95	2.88, less.						
Pantaloons and take 34 yard		67.34	192.85	36.66	12.29	35.58	2.88, less.						
One yard of av	11	40.79	114.25	36.66	11.57	20.25	2.95, less.						
A coat made of	25	91.78	257.06	36.66	11.57	45.56	2.95, less.						
One yard of hig		72.31	158.	36.66	Less	1, less	8.38, less.						
A coat made of 2.76 162.71 355.50				36.66	Less	2.25, less	8.38, less.						
Ten square yar	.52	49.13	127.20	36.66	15.42	29.60	1.88, more.						



It will be seen, by inspection of the Table B, that fractions of cents and of ounces are expressed by decimals. In fixing the value of the articles for the purpose of estimating the amount of the internal-revenue tax, it is assumed that the value of the home article will not fall below the cost in gold of importing a similar article, and with the present duty and expense of importation will amount to about 80 per cent on the foreign cost of the goods. foreign cost of the goods, with 80 per cent added, is therefore taken to be the proper valuation of the article for taxation. This is the mode by which the amount of the internal-revenue tax on the various articles is determined under the present tariff. It is assumed, that, under the proposed tariff, the home value of the articles will be increased in proportion to the amount of the proposed increase of duty. The internal tax, therefore, under the proposed tariff, will be increased in amount equal to the rate of the internal-revenue tax on the increase of duty. In the statement of the Executive Committee, ten per cent on the foreign cost of the article is assumed to be sufficient to cover the internal-revenue tax of six per cent on the home value. But on the basis of calulation above given it will be insufficient. For example: the home value, under the present tariff, of a cassimere costing 93 cents abroad, with 80 per cent added, is 167.40 cents. Six per cent of that amount would be 10.04 cents. Ten per cent upon the foreign cost would be 9.30 cents. Under the proposed tariff, 12.23 cents, the amount of increase of the duty, would be added to the present home value 167.40 cents, making the home value under the proposed tariff 179.63 cents. Six per cent of that amount would be 10.77, against 9.30; showing that ten per cent upon the foreign value is not equal to six per cent upon the home value by 1.47 cents, without providing for the internal tax upon the domestic materials.

In estimating the increase of duty on wool under the proposed tariff, set down in the table at 36.66 per cent on foreign cost, Mestiza wools, which are the principal competing wools, are assumed to average fifteen cents per pound, as indicated on page 12 of the "Statement of the Executive Committee," &c.

It will be seen by the table, that the percentage of protection to the manufacturer, under the proposed tariff, upon cassimeres, doeskins, and broadcloths, constituting the bulk of woollen goods imported into and manufactured in this country, is less than under the present tariff; and that upon high-cost broadcloths, in consequence of the ad valorem duty being reduced from 45 to 35 per cent, the protection is over 8 per cent less. It appears by the table, that in delaines, by far the most important manufacture of dress goods in this country, the protective duty under the proposed tariff is slightly increased. If full allowance were made, in adjusting the proposed duty, for the proposed duty on cotton. the percentage of protection would be less than under the present tariff, as will be seen by reference to page 22 of "Statement of Executive Committee," which shows the manner in which the duties were adjusted.

The preceding Table B shows that the cost of goods to the consumer is enhanced by the duty less than is generally supposed. It will be seen, that on the cloth required for a full suit of clothes made of fancy cassimeres, which suit at present prices would not cost less than fifty dollars, the whole duty under the present tariff is 386.02 cents, being 7.72 per cent of the cost. Of this, 104.92 cents is the duty on wool; 10.95 cents, the duty on dyestuffs and other materials; 11.59 cents, the charges on account of duties; 75.90 cents, the internal-revenue tax; and 182.66 cents remains for the protection of the manufacturer.

The table shows that, under the proposed tariff, the whole duty will be 477.75 cents; the duty on wool will be 201.15 cents; the duty on dyestuffs and other materials, 10.95 cents; the charges on account of duties, 21.21 cents; and the internal-revenue tax, 81,40 cents. The whole amount of duty on a suit of clothes, by which the manufacturer is to be sustained, will be only 163.04 cents, or 3.26 per cent of the whole cost of a suit of clothes. By comparing the duties and taxes under the present and under the proposed tariff, as exhibited in the table, it will be seen that the total amount of increase of duty on a suit of clothes will be less than one dollar.

CARPETS.

The amount of neutralizing duties and charges on the materials used in the manufacture of the leading descriptions of carpets is exhibited in the table on page 27 of the "Statement of the Executive Committee" before referred to. The data from which these amounts were respectively derived are contained in the following memoranda:—

Ingrain Carpets.

The duty on the washed wools used in the manufacture of ingrain carpets is six cents per pound; and, on the unwashed wools, three cents per pound. 100 lbs. of the washed wools will make on an average 64 lbs. of finished carpets; and, of the unwashed, 32 lbs. Now, if we divide \$6.00, the amount of duty paid on 100 lbs. of washed wool, by 64, the number of lbs. of carpets which said 100 lbs. of wool will make, the quotient will be 9.375 cts.; showing that the duty on the wool in the finished carpets is 9.375 cts. per lb., which is equal to 0.585 cts. per ounce. \$3.00, the duty on 100 lbs. of unwashed wool, divided by

32 lbs. of carpets, gives the same result: we may therefore take the average amount of duty on the wool, in ingrain carpets, to be 0.585 cts. per ounce.

Two-ply carpets of standard quality weigh on an average 20 ounces per yard; which, multiplied by 0.585 cents, the duty per ounce, gives 11.70 cents as the amount of duty on the wool required for a yard of two-ply carpet.

Three-ply carpets weigh on an average 26 ounces per yard; which, multiplied by 0.585 cents, the duty per ounce, gives 15.23 cents as the amount of duty on the wool required for a yard of three-ply carpet.

Tapestry carpets, and carpets wrought by the Jacquard

Machine.

The wools of which these carpets are made consist, on an average, of one part of Canada combing wool to four parts of Cordova or other similar wool paying a like duty; the Canada wool being required for certain colors.

The duty on Canada wool is twelve cents per lb. and ten per cent ad valorem, which is equal to 16.50 cents per lb.; and as 2 lbs. of wool are required for one pound of worsted, it follows that the duty on the wool in the worsted amounts to 33 cents per lb.

The duty on Cordova and other suitable wools is 6 cents per lb.; and as 3 pounds* of such wools are required to make one pound of worsted, it follows that the duty on the wool in the worsted amounts to 18 cents per lb. Now, as 4 lbs. of this worsted are used to 1 lb. of the Canada, the average amount of duty paid on the wool in the worsted used is as follows:—

[•] The waste of Cordova wool in working is now much more than it used to be. Formerly 2.60 lbs. of wool would make a pound of worsted, whereas now fully 3 are required.

4 lbs. of Cordova,	&c.	, w	ors	ted	, at	: 18	e ce	nte	pe	r l	b.	. 72 cents.
1 lb. of Cordova w	ors	ted	at	33	ce	nts	pe	r lb	٠.			. 33 cents.
5 lbs. divided into	•					•						105 cents.
Gives						_		_	_	_		21 cts. ner lb.

Average duty on the wool for one lb. of worsted, 21 cents per lb., is equal to 1.312 cents per ounce.

Tapestry-Brussels carpets of standard quality require 9 ounces of worsted per running yard; which, multiplied by 1.312 cts., the duty per ounce, gives 11.80 cts. as the amount of duty on the wool used for a yard of tapestry Brussels carpet.

Tapestry-velvet carpets of standard quality require 13.50 ounces of worsted per running yard, which, multiplied by 1.312 cts., the duty per ounce, gives 17.71 cts. as the amount of duty on the wool used for a yard of tapestry velvet carpet.

Brussels carpets, five frame, of standard quality, wrought by the Jacquard machine, require 19 ounces of worsted per running yard; which, multiplied by 1.312 cts., the duty per ounce, gives 24.92 cts. as the amount of duty on the work used for a yard of this kind of carpeting.

Wilton carpets, five frame, of standard quality, wrought by the Jacquard machine, require 30 ounces of worsted per running yard; which, multiplied by 1.312 cents, the duty per ounce, gives 39.36 cents, as the amount of duty on the wool used for a yard of this kind of carpeting.

Duties on the Linen Yarn.

Linen yarn of the quality used in the manufacture of the carpets above designated costs abroad, on an average, 23 cents per pound, on which the 30 per cent duty amounts to 6.90 cents per pound; and if, in addition to this, we make the usual allowance for the waste of the

yarn in working it, the amount of the duty on a pound of the linen yarn in the carpets will be, at least, 8 cents per pound. Now, as tapestry velvets and Wilton carpets, each require one pound of linen yarn per running yard; the duty on the linen yarn for these carpets will be eight cents per yard, and as tapestry Brussels carpets, and Brussels carpets wrought by the Jacquard machine, each require only three-fourths of a pound of linen yarn per running yard, the duty on the linen yarn for these carpets will be 6 cents per yard.

By comparing the foregoing results with the respective amounts of the duties on the wool and on the linen yarn used in the various kinds of carpets, as exhibited in the table before referred to on page 27 of the statement of the Executive Committee, they will be found to correspond. The amounts of the duties on the wools used, as given in this table, exceed those given in a similar table on page of the "Statement of the Carpet Manufacturers." respects fine carpets, - viz., Tapestry Brussels, Tapestryvelvet, Jacquard Brussels, and Wilton carpets, - this excess is due to the proposed duty on Canada wool; no allowance, as will be seen by referring to page 7 of the manufacturers' "Statement," having been made for this duty. As respects two-ply and three-ply ingrain carpets, the slight excess is due to different bases of calculation; the proposed specific duty on the carpets, however, being within the amounts given in the manufacturers' "Statement." In adjusting the specific duties on carpets, no allowance is made for the loss on the noils consequent upon the duty on wools, as explained on page 4 of the manufacturers' "Statement."

Vamuel Batchelder

National Issociation of Wool Mannfacturers.

1867.

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THIRD ANNUAL REPORT

DECOMPTED TO PUE BRIDGISTON SE TOO

NNUAL MEETING, AT NEW YORK, ON THE SECOND OF OCTOBER, 1807:

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TOHS L. HAVES.

TRAINING STORY

BUSTON:

PRESS OF JOHN WILSON AND SON.



National Issociation of Wool Manufacturers, L.S.

1867.

THIRD ANNUAL REPORT

PRESENTED TO THE ASSOCIATION AT THE

ANNUAL MEETING, AT NEW YORK, ON THE SECOND OF OCTOBER, 1867.

BY

JOHN L. HAYES,

SECRETARY.

BOSTON:

PRESS OF JOHN WILSON AND SON.

1867.



THIRD ANNUAL REPORT.

THE broader the sphere of action proposed by individuals or organizations of men, the greater is the difficulty in exhibiting immediate practical results, and the more distant must be the intervals when such results can be safely recorded. The value of the great events which give an impulse to society, - such as the higher discoveries in science, the radical inventions, the introduction of new raw materials in the arts, or the new ideas in social science, - can be determined only at the end of decades or centuries. The impatient utilitarian inquirer, who seeks to ascertain, at the Patent Office or Smithsonian Institution, the practical progress in the arts or sciences for the last year, will get no satisfactory answer. The records from year to year show only the fields in which invention and science have been laboring. The really valuable fruits are matured only by time. An Association having so broad a purpose as that of promoting the prosperity and advancement of the woollen interest of this country, can scarcely do more, in its early annual reports, than to show the direction in which its labors have been applied. If these labors have been wisely and faithfully directed, if their tendency is to promote the advancement of the great national industry which it has in charge, the responsibility of the Association for the year in review will have been faithfully discharged. With the hope that in what has been undertaken, and such good as can be seen to have been accomplished, assurance may be found of the capacity of the Association for future and more extended influence, I proceed to a statement of our transactions for the year which has passed.

The plan of our organization has made it incumbent upon the Secretary to submit from time to time to the Government of the Association, for the purpose of advice and direction, reports of the proceedings with which he has been immediately connected. A résumé of such reports as have received the sanction of the Government, although they may be familiar to such of its members as have been present at the Government meetings, will best convey to all the members of the Association, in the order of time, a narrative of the more important proceedings of the last year. Similar reports, read at the last annual meeting, presented a history of the connection of the Association with the then unfinished legislation of Congress respecting the wool and woollen interests. The resumption of this narrative is contained in the following Report, made on March 27, 1867, shortly after the passage of the wool and woollen tariff, and the change in the revenue bill: -

To the Government of the "National Association of Wool Manufacturers:"

GENTLEMEN, — In pursuance of directions from your Executive Committee, and sustained by the unanimous resolve of the Association at its annual meeting in October, I proceeded to Washington early in December last, for the purpose of advocating the passage by Congress of the provisions of the tariff respecting wool and woollens, which had twice passed the House, and were pending in the Senate.

After the arrival in Washington of Mr. Montgomery of Ohio, and Mr. Garland of Illinois, representatives of the National Wool-growers' Association, and Mr. Kingsbury and myself,

of our own Association, we were informed that the Committee on Finance, of the Senate, would consider the tariff during the Christmas holidays. An appointment was made for a hearing by Mr. Fessenden, Chairman of the Senate Finance Committee; and the two representatives of the wool-growers, and the two representatives of the manufacturers, together, for the first time in the history of this country, presented their statements before the Committee of Congress, as to the legislation demanded to give stability to the national woollen interest as a whole. Our statements, made with all the fulness that we could desire, were patiently and courteously received by the Committee, and evidently made an impression which separate and partial representations could never have produced.

Shortly after this hearing, the Report and projet of a Tariff Bill of the Special Commissioner of the Revenue were published. It is unnecessary to say, that this report and bill ignored the conclusions so maturely considered and adopted by joint committees of the wool-growers and manufacturers, and the measures and bill recommended by the former Revenue Commission, and recognized in the provisions which had twice passed the House.* The policy recommended by the Special Commissioner was founded upon the doctrine of free trade in raw materials, formerly generally entertained by manufacturers, and still adhered to by some, but diametrically opposed to that adopted by the Association, — of recognizing the right of equal protection to the wool-grower and manufacturer. Although much apprehension was felt that these views might find sympathy in the

[•] The acknowledgment is due to Mr. Wells, that, notwithstanding his original opinions, after the passage of the Tariff Bill respecting wool and woollens, he earnestly exerted himself, with the Secretary of the Treasury, to prevent the decided purpose of Congress from being defeated by the Presidential veto. Great credit is also due to Mr. Wells for his efforts in behalf of the reduction of the revenue tax.

commercial ideas entertained by some members of the Finance Committee, the policy of the Special Commissioner of the Revenue was not sustained, and the duties on wool, given in the House bill, were recommended by the Finance Committee. The manufacturers were less fortunate. The provisions in our behalf were materially deranged, both in substance and form, from those which the manufacturers had recommended. principle pervading the provisions of the House bill respecting manufactures of wool, adopted directly from the recommendations of the manufacturers, was, that the specific duty should be simply compensatory for the duty on wool and other raw material; while the protection to the manufacturer of 25 per cent net, and the compensation for the internal-revenue tax, should be provided for in an ad-valorem duty of 35 per cent. The amendments reported by the Senate Finance Committee fixed or reduced indiscriminately the specific and ad-valorem duties, without regard to the above principle, so carefully considered in the House bill. Thus, the specific duty on cloths was reduced from 50 to 45 cents, while the ad-valorem duty of 35 per cent was retained. The ad-valorem duty on blankets and knit goods was reduced from 35 per cent to 30 per cent. duties on carpets were made wholly specific, as under the present tariff; thus completely violating the principle of the House bill, and making an invidious and suspicious distinction between carpets and other manufactures of wool. In the House bill, the relations of the different branches of woollen manufactures among themselves were most carefully provided for. An unjust distinction had always existed against the manufacturer of knit goods, who has for a domestic rival the manufacturer of flannels, a higher duty having been always given to the latter. In the House bill, the same rates of duty were imposed upon the manufactures of each, under a scale of minimums proportioned to the amount of wool which they might contain, determined by the cost abroad. In the amendments of the

Senate Committee, the duty on flannels was fixed at 45 cents specific and 35 per cent ad valorem; while the rates on knit goods, which are clearly entitled to the same amount of compensating and protective duty, were fixed at 40 cents specific, and 30 per cent ad valorem. Certain classes of knit goods, such as fine, fancy hosiery, are composed entirely of wool paying the highest duty, and are clearly entitled to the same specific and ad-valorem duty as cloths and shawls. Under the Senate amendments, they were given a compensatory specific duty far below what they are entitled to, and, at the same time, had a diminished ad-valorem duty.

The disturbance of the scheme of duties recommended by the manufacturers was so complete, that it seemed impracticable to remedy it, except by a substitution of the House provisions, which it was believed the Senate would not be likely to assent to. It was therefore determined to attempt no amendments in the Senate, and to rely upon restoring our duties in the House.

After the passage of the general tariff bill by the Senate, and its reference to the Committee of Ways and Means of the House, Mr. Montgomery, of the Wool-growers' Association, and myself, requested another hearing before that Committee. In the mean time I had prepared, and caused to be printed, the accompanying paper, entitled "Considerations in favor of the provisions of House Bill No. 718, respecting the duties on wool and the manufactures of wool," accompanied by "A Statement in behalf of the National Wool-growers' Association." Appearing before that Committee, I was accompanied by Mr. Montgomery, and Messrs. Whiting, Simpson, and Fay, who desired to make some special statements relative to the carpet and worsted industries. The result of this hearing, at which I read the paper above mentioned, and made additional comments, was the adoption in substance of the provisions of the original House bill respecting woollens, the only



material change being the reduction of the ad-valorem rate from 85 per cent to 30 per cent, in consequence of the proposed reduction of the internal-revenue tax from 5 to 21 per cent. Although it was strongly urged that the depressed condition of our industry, and the previous reduction of our specific duty from 53 cents to 50 cents, were reasons why the reduction of our ad-valorem duty should not be made, I did not deem it wise to insist upon these objections, as the reduction of the ad-valorem might be a potent consideration for the reduction of the internal-revenue tax. At the time of this hearing, the reduction of the tax upon woollen manufactures had not been determined upon; and it is believed that the facts presented as to the depressed condition of our industry, and particularly the important fact that our manufacturers, in many instances, were paying the revenue tax out of their capital, and not out of their profits, had much influence upon the Committee. ever this may have been, there cannot be a doubt that the concessions made by our Association to the wool-growing interest, so powerful in the Committee and the House, was the principal reason of the exceptional favor extended to the woollen manufacture in the reduction of the revenue tax. The reduction, as originally proposed in Committee, from 5 to 21 per cent, was made by a Western member, who strongly sympathized with our industry, although opposed to a general protective policy. The reduction of the revenue tax may therefore be claimed as the direct result of our policy, and the first-fruits of the labors of our Association. fruits which bear no merely speculative value. The internalrevenue tax paid in the year 1865, upon woollen fabrics and all manufactures of wool, is officially stated at \$7,947,094. The reduction of one-half will be a saving of nearly four millions of dollars, effected by the policy inaugurated by this institution. Upon the substantial adoption, in the general tariff, of the provisions favorable to our own interests, the

special labors for our own interests were for the time ended, and our efforts were directed to the passage of the Tariff Bill as a whole. The pleasantest relations were established with the representatives of other interests demanding protection; such as the iron, coal, steel, glass, and linen industries. action of the Senate, in substituting an entirely different bill from that which had passed the House, involved great delay, both in the Senate and in the Committee of Ways and Means, when the Senate bill came before the latter Committee; and it was mainly in consequence of a want of cooperation between the two Houses that the bill came up in the House at so late a period, that a factious opposition against an undoubted majority was able to defeat the general tariff The temporary absence of Mr. Morrill, the able and true friend of American industry, from his charge of the bill reported, prolonged the delay. No one who had carefully watched the progress of debate in the Senate or House, could doubt the predominance of opinion, in both bodies, in favor of protection. The sentiment, particularly among Western members, grew under discussion. It was therefore from want of time only, and not from progress of free-trade opinions, as has been intimated, that the general tariff bill failed in the House. This is an important observation, in reference to the permanency of such tariff measures as finally passed Congress.

When the Tariff Bill was taken up in the Committee of the Whole, the provisions in relation to wool and manufactures of wool passed the House without division. The slow progress made in the passage of the several hundred amendments, finally admonished the friends of the bill that there would not be time to act upon all the amendments. Attempts were made to get the bill out of Committee; but the two-thirds vote necessary to effect this could not be secured, and on Thursday, five days before the end of the session, the general tariff was abandoned by the chairman of the committee in charge. On that day, the

final and hopeless defeat of the bill was announced by telegraph to all parts of the country. Up to this time, the friends of the woollen interest had labored faithfully, in common with all other interests demanding protection. They had not, even in private conversation among themselves, referred to the possibility of providing for their interests separately from others. On the evening that the defeat of the general tariff bill was announced, the representatives of the wool and woollen interests, Mr. Montgomery, Mr. Kingsbury, and myself, met in consultation, and resolved, that, as a last measure of self-preservation, it was our duty to attempt to revive the bill known as the "Bingham Bill," providing for wool and woollens alone, which had passed the House, and had been referred to the Committee on Finance of the Senate. Senators from the wool-growing States were seen on the same evening; and a delegation of Ohio members called upon Mr. Sherman, of Ohio, a member of the Committee on Finance, to induce him to have the "Bingham Bill" reported from Committee to the Senate, the next morning. The representatives of the two interests prepared and presented at the Committee-room, early on the next morning, the following letter: -

WASHINGTON, March 2, 1867.

Hon. Wm. P. Fessenden, Chairman of the Committee on Finance, United-States Senate.

SIR, — We have urged earnestly, and with such ability as we could command, the passage of the Tariff, embracing all the various interests of the country, and have sought to obtain, in common with others, that protection which we think the state of the finances of the country and the conditions of its industry not only justify, but imperatively demand. But, having sought our end, in common with others, till there is no longer hope in that direction, we deem it no breach of propriety to ask now, for the interests we especially represent, that the bill known as the "Bingham Bill" may be passed by the Senate.

If this bill could be reported by your Committee without amendment, so that there may be a day for a second reading, if required, we are quite confident that it may be passed. Permit us to say, that this bill, which was passed by the House last year, is similar in substance to that passed recently by the Senate, in relation to the same subjects, and almost literally identical with the provisions respecting wool and woollens in the main tariff bills passed by the House in July last, and, so far as relates to that interest, passed in Committee of the Whole at the present session, and last year, and thus far this year, only for want of time.

We add one word more in the especial interests of worsteds. The termination of the Reciprocity Treaty placed the same duty on Canada wool as is contemplated by this bill; and the failure to grant the corresponding duty on worsteds will entail, on that branch of our interests, absolute ruin.

We have the honor to be, very respectfully,

Your obedient servants,

R. M. MONTGOMERY.

Chairman of the Executive Committee of the National Woolgrowers' Association.

JOHN L. HAYES.

Secretary of the National Association of Wool-manufacturers.

N. KINGSBURY,

Member of the Executive Committee of the National Association of Wool-manufacturers.

The Finance Committee acted immediately upon this communication; but, with a very natural prejudice in favor of their own work, instructed Mr. Sherman to report Mr. Bingham's bill, with the substitution of the amendments respecting wool and woollens, which had passed the Senate. The reporting of this bill immediately suggested to the other interests that there was an opportunity to provide for them by a general provision giving twenty per cent upon all other articles im-

ported. It was generally believed, that the Senate amendments on wool and woollens, with this proviso, would not go to the Committee of the Whole in the House, and would pass the House by a simple majority. Fortunately, a communication was made to us by a Western member, -- formerly strongly opposed to the manufacturers, but latterly our fast friend, - that he had been informed by the Speaker, that he should decide that any amendment to a revenue bill, increasing the amount of duty, must go to the Committee of the Whole; from which it could be extricated only by a two-thirds vote. having been confirmed by a further conference of our friends with the Speaker, it was resolved that a change of the measures proposed in the Senate should be recommended. active means were taken to advise our friends in the Senate, and particularly those from the wool-growing States, that any amendment in the bill as it passed the House would inevitably defeat it. Mr. Sherman, with this view, withdrew, during the night, the substitution of the Senate amendments, leaving the original bill as passed by the House. The bill became the first in order of business, on the morning of Saturday, the 2d of March. Mr. Cattell moved an amendment, imposing twenty per cent upon all other articles imported. The fate of the bill depended upon the rejection of this amendment. In spite of the suggestions of Senators, and the ruling of the President of the Senate, that all reference to the probable action of the other House was out of order, the point was distinctly presented, that any amendment would be fatal to the bill in the other House. The amendment was rejected, and, upon the final vote, which was then taken, the bill passed by the decisive vote of 31 to 12: several Western Senators, who had opposed the general tariff bill, having voted for this; while votes of Eastern Senators, it is believed, would have been secured for the bill, if necessary for its success. The bill, however, notwithstanding the expressions of its popularity with the representatives of the people, by its sanction three times in the House and twice in the Senate, was not yet free from danger. There is reason to believe that powerful influences from the importing interest were brought to bear upon the President, to prevent his signature. Three anxious hours were passed, by the friends of the bill, in waiting near the room in the Capitol where the President sat with his Cabinet, signing bills, during the last moments of the session. Hour after hour passed. Such earnest men as Delano, and Bingham, from Ohio, were apprised of danger, and hurried from the House to the President's room. ences, aided by the advice of the Secretary of the Treasury and of the Attorney-General, a citizen of the leading wool-growing State, Ohio, prevailed; and, at a moment before the hour of twelve by the President's watch, the bill received the President's signature, - having become a law, not so much through the personal solicitation of its advocates, as its intrinsic merits, and the influence of the carefully considered facts and statements of the friends of the industries concerned, both in and out of Congress, an influence always justly potential with candid legislators.

The passage of this bill has, nevertheless, been spoken of as a trick of parliamentary legerdemain, and its solicitation as a breach of faith to other interests. So far from this, the policy which we should adopt, in case of the failure of the general tariff, had been deliberately planned, and had been announced and published in the Annual Report of the Association, in The Executive Committee said, in that Report, October last. as follows: "They further recommend that the Association should favor the passage of Mr. Bingham's Bill, providing for wool and woollens alone, only in the event of the failure of the general tariff bill. The Committee regard the interests of the wool-manufacturers as identified with the prosperity of all the industrial interests of the country; and they would not separate themselves from other interests in asking protective legislation, except as a last measure of self-preservation." I am happy to bear testimony to the magnanimity of the representatives of other interests in Washington, who personally acknowledged that we deserved success, for the patience and forethought with which we had adjusted every partial or sectional interest, and for the perseverance and consistency with which we had adhered to the policy originally adopted. So far from the general protective cause being weakened by the withdrawal of our forces, it is strengthened by the occupation of another stronghold. A prominent iron manufacturer writes me, "Everybody is glad of the passage of the woollen bill, for they say it is a sure thing for all the rest." The tobacco and cigar interests were provided for last summer, the wool interests this spring. The outposts of protection have been won by provision for the most suffering industries. The country and Congress are thus twice pledged to a policy which will in time entrench every American industry with effective barriers of countervailing duties.

I will add a few words as to the results which have been achieved. It is a subject of congratulation, that the bill was passed, with trifling exceptions in the slight reduction of the amounts of specific duties, in the very terms in which it was originally framed by the representatives of the two Associations, — a fact unparalleled in tariff legislation, and not less honorable to Congress, as indicating its respect to the great industrial interests of the country, than to the Associations whose representatives had won such respect. No branch of the woollen manufacture can object to this bill, for each was consulted and considered in its preparation. The same system of duties is applied to each; each has the same ad-valorem duty. and each specific duties, only compensatory for the duty on its raw material. The bill being founded upon principle, has all the elements of permanency; and therefore the business of the country may adapt itself to it, with the confidence that, with proper vigilance on our part, it is less likely to be disturbed than any tariff system heretofore adopted. If higher duties are placed upon the raw material, they furnish a reason for high specific duties on manufactures; and the high duties on the raw material will not operate upon domestic wool until the high duties on goods shall have checked importations and revived manufactures, so that the manufacturer shall be able to pay the increased duties on wool. The first benefit from the increased duty will accrue to the manufacturer; and when he flourishes, and not till then, will the wool-grower receive his advantage in the increased price of wool, relieved, under this law, from ruinous competition with the wools of Buenos Ayres and the Cape. The great boon to the manufacturer will be the saving of the present, and increasing the future, supply of domestic wool. The saving of sheep and lambs from the butcher, during the present season, in consequence of the passage of this bill, will have an effect upon the supply of wool which will be of momentous importance to the manufacturer. While these general results of this bill will benefit all branches of the woollen manufacture, others are saved by its provisions from hopeless ruin. The worsted business, called into existence by free Canada wool under the Reciprocity Treaty, and prostrated by the repeal of that treaty, has lingered along only in hope of the relief which this bill promised. It is now saved; and its prospects are most hopeful. The warps are already being prepared for the alpacas and Italian cloths, whose manufacture had been abandoned; and we shall supply ourselves with many millions in value of goods, for which we have depended upon England and France.

Valuable as this tariff bill will be to us, our work is but half done until all the other industries of the country receive the same favorable legislation which has been accorded to us. There can be no greater error than to suppose, that, having provided for ourselves, we shall be benefited by being able to obtain the products of other industries at cheap rates under a low tariff. We can thrive only when our consumers thrive, and when the whole productive industry of the country is profitably occupied. It may be of some advantage to obtain, temporarily, the iron and coal used in our manufacture, at low rates. But it is of vastly greater consequence that a hundred thousand iron-workmen, thrown out of employment by want of sufficient protection, and a hundred thousand farmers supplying them agricultural products, should have means to consume our goods, through an adequate tariff on coal and iron. Next to checking excessive importations of competing goods, our most important necessity is to increase the purchasing power of our own people, by diversifying their industry. All our markets must be guarded, and access to them prevented, except upon such terms as shall not injure our working people, - the great consuming class, - nor lessen their productive powers. So far from being isolated from other interests by our present position, new obligations are imposed upon us to co-operate in establishing a complete and permanent system of legislation, which shall develop to the utmost every American industry.

In concluding this Report, I will add that it has been necessary for me, in the discharge of my official responsibility, to confine myself principally to a statement of the proceedings in which I have taken part, or which have come under my immediate observation.* Other persons and influences, not alluded to, have undoubtedly contributed not less efficiently to the results achieved for our cause. The labors of Mr. Randall,

[•] The general reader, into whose hands this report may fall, will understand that this statement of the relations of the representatives of the Association with the legislation of Congress was required in the discharge of the accountability devolved upon them; and that the publication of this statement is the only means of communicating information to the widely scattered members of the Association, for whom only it is intended.

the President of the Wool-growers' Association, demand the first notice. Although prevented by his state of health from being present at Washington, Mr. Randall contributed most materially to our success by his private correspondence with public men, by his vigorous articles in the "Rural New-Yorker," and, above all, by the support which his weight of character and personal influence gave to our cause. Without Mr. Montgomery, the more immediate representative of the wool-growers, at Washington, who was present during the whole session, nothing could have been accomplished. comprehensive grasp of the general questions of political economy, as well as his familiarity with details affecting our industries, and his clear perception of the mutuality of interest between the grower and the manufacturer, were of incalculable service in preparing the way for favorable legislation. Mr. Pottle of New York, and Mr. Garland of Illinois, although remaining at Washington a comparatively brief period, were his able coadjutors.

Many members of our own Association were not unsparing of personal efforts in our cause. I need not say, that, during the presence of Mr. Kingsbury at Washington, I was almost wholly relieved of responsibility, by reliance upon his sound While alone at Washington, I principally addressed myself, at both sessions of Congress, to Mr. Edmands for direction. Mr. Edmands gave much of his valuable time to correspondence with me, containing invaluable advice, and to communications with leading men of Congress; besides giving us the benefit of his countenance and influence for several days at the Capitol. My own thanks are most heartily rendered, and are due from the Association to our Treasurer, Mr. Walter Hastinge, who has taken upon himself, without charge, the management of our financial affairs, and has supplied the occasional deficiency of the Treasury from his private Mr. Pomeroy, Mr. Stitt, Mr. Adams, Mr. Roberts,

Mr. Downes, Mr. Goff, and others, did active service during brief visits at Washington, and cheered those of us who were worn out through waiting, by their sympathy and encouragement; a service in which Mr. Lawrence and Mr. Davis bore part in their correspondence.* It is gratifying to observe, that these individual efforts never disturbed that unity of action which has been characteristic of our Association, and a principal cause of its success,—a unity founded solely upon the organization of our Association, and which has made it a power in the country.

Respectfully submitted,

JOHN L. HAYES, Secretary.

After the reading of this report, the following resolutions were unanimously passed by the Government. They were published in the newspapers of New York, Pennsylvania, and Massachusetts; and, from the comments of the press, it is believed were favorable in dispelling any prejudice which existed on account of supposed partial legislation for our peculiar interests:—

- "Resolved, That the gratitude of the woollen manufacturers of the United States is due to the Congress of the United States for the recent tariff legislation, which has established such just and wise relations between the domestic growers and manufacturers of wool, and for the relief afforded by the reduction of the revenue tax upon manufactures of wool.
- "Resolved, That the most appropriate means of testifying this gratitude is for the manufacturers to strive for the utmost perfection and soundness in their fabrics; so that consumers

^{*} Of persons not connected with the Wool-growers', our own Association, or Congress, there is no one to whom we are so much indebted as to Mr. Samuel Wilkeson, Secretary of the American Home-Labor League, who rendered invaluable service by the contribution to the "New-York Tribune" of a series of letters and articles showing the depressed condition of the wool and woollen interests.

may recognize the benefits of protecting American industry through the increased excellence of its products.

"Resolved, That the most hopeful indication of the recent legislation affecting our own industry is, that it is an earnest of what will be done for all other American industries; and that the only assurance for our continued prosperity is a national system which shall develop all branches of manufacturing and agricultural enterprise in our country, and especially the great manufactures of iron, steel, glass, cotton, wool, flax, and silk, by protecting them against the colossal establishments, the immense capital, and low wages, of Europe."

On the 18th of September, 1867, the Secretary made the following communication to the Government:—

To the Government of the "National Association of Wool-Manufacturers:"

GENTLEMEN, - I have the honor to report such proceedings on the part of the Executive Committee and your Secretary, since the last meeting of the Government, as affect the general interests of the woollen manufacturers. It is known, that, in the recent tariff bill respecting wool and woollens, a provision was incorporated introducing an entirely new feature in the mode of assessing the duties on wool. This feature consists in dividing the wool, for the purpose of fixing the duties to be charged thereon, into three classes, consisting of clothing wools, combing wools, and carpet and other similar wools. For the purpose of carrying into effect this classification, it was provided, that a sufficient number of distinctive samples of the various kinds of wool, selected and prepared under the direction of the Secretary of the Treasury, and duly verified by him, should be deposited in the custom houses and elsewhere, to be used by the proper officers of the customs to determine the classes above specified, to which all imported wools belong. The Secretary of the Treasury, after consultation with representatives of this Association and of the National Wool-growers' Association and the Special Commissioner of the Revenue, selected Mr. George William Bond, of Boston, to prepare the samples above named. Before accepting the samples prepared by Mr. Bond, the Secretary of the Treasury, with commendable consideration for the two great industries most interested in the proper selection of these samples, formally requested the proper representatives of this Association to meet the representatives of the National Wool-growers' Association, at a fixed time, for the purpose of critically examining the samples. The representatives of the two interests — consisting, on the part of the wool-growers, of Mr. Randall of New York, Mr. Townshend of Ohio, Mr. Hammond of Vermont, Mr. Garland of Illinois, and Mr. Loomis of Connecticut; and, on the part of the manufacturers, Mr. Edmands of Massachusetts, Mr. Kingsbury of Connecticut, and myself — met at Boston on May The Government was represented by Mr. Ed-22d, 1867. wards of the Treasury Department, and Messrs. Baush and Rice, appraisers in the custom-houses of New York and Boston.

All the samples prepared by Mr. Bond, consisting of twelve sets containing eighty-four varieties of wool, were critically examined and compared by the two committees, the examination occupying several hours. Mr. Bond cheerfully acceded to the suggestions made by members of the wool-growers' committee, and approved by the manufacturers; and at the close of the examination the following resolution, offered by Mr. Townshend of Ohio, was unanimously passed by the two committees, and forwarded to the Secretary of the Treasury:—

"Resolved, By the Committees of the National Wool-growers' Association and the National Association of Wool-manufacturers, convened in Boston, May 22d, 1867, under the authority of the Honorable the Secretary of the Treasury, to examine the samples of wool, hair, &c., collected and prepared by Mr.

George W. Bond, to be used as standards of comparison in the custom-houses of the United States, under the provisions of the Act of March 2d, 1867, that they have carefully examined and compared all the said samples now prepared; and that, as finally agreed on, they are suitable for the objects for which they are intended."

The unanimity with which these samples were approved, was not only an evidence of the wisdom of the Secretary of the Treasury, and of the fidelity and skill of the expert selected by him for this important and delicate work, but of the candor and good faith which now govern the relations between the wool-growers and manufacturers.

It is a subject of sincere congratulation, that the last question which can arise for a long time between the two interests has been finally disposed of.

An important matter, which has recently received the attention of the Executive Committee of the Association and your Secretary, is the prevention of a construction of the tariff by custom-house appraisers, which would have admitted a large class of goods at merely nominal duties, in defiance of the obvious intent of the law. My attention, while at Washington in August last, was called by a member of the Executive Committee to the fact, that it was the intent of foreign importers to introduce a class of goods made of wool waste, at a low duty, upon the ground that a circular of the Secretary of the Treasury was in operation, declaring that "wool waste is not recognized by the tariff as wool," and that the appraisers were inclined to favor this view. Upon calling at the Treasury Department, I found that such a circular was in existence; and upon examining, with the officer in charge, the original papers of the decision upon which the declaration, that "wool waste is not recognized by the tariff as wool," is founded, it was seen that this declaration was an obiter dictum, the subject of waste not having been directly presented. Upon

consideration of the facts, the Department was of the opinion that the contemplated construction was not justified by the law, and instructed the appraisers to that effect.

A recent decision of the custom-house appraisers at New York and Boston, which admits at a low rate of duty manufactures of felt, and which bears unfavorably upon our manufacturers of that class of goods as well as the manufactures of woven bockings and druggets, is receiving careful consideration. The result, it is hoped, will be favorable to the construction claimed for the interests of our manufacturers.

I avail myself of this occasion to call upon members of the Association to inform me of any devices to violate the intent of the existing tariff laws, affecting the importations of woollen goods. It is extremely desirable that any defects of doubtful construction should be remedied at the Treasury Department, without calling for additional legislation.

Respectfully submitted,

JOHN L. HAYES, Secretary.

The above Reports contain all that is important to be communicated relative to the "Transactions" of the Association.

The most important event of the last year — because it was the inauguration of a policy which unites all the wool interests of the country in a solid phalanx — has been the passage of the wool and woollen tariff bill. As this bill has been in operation half a year, opportunity has been afforded to form some judgment as to its operation and probable continuance. Doubts have been expressed as to the continued support of this measure by the wool-growers of the country, on account of the prevailing low prices of domestic wool. It will be interesting to the members of this Association to be informed of the opinions of wool-growers of the country upon this subject, as expressed by their authorized organs and most influential men. The "Rural New-Yorker" — an agricultural paper

published in Rochester; N.Y., having, it is said, a circulation of sixty thousand subscribers — contains a department of sheep-husbandry, edited by Mr. Randall, the distinguished President of the National Wool-growers' Association. In the issue of August 10th, 1867, in an article entitled "Wool-growing in the South-west," the eminent editor discusses the question, whether wool-growing is surrounded by natural or artificial circumstances which render it necessarily more precarious than other industries. After remarking, that observation of a period of more than thirty-five years before the war had satisfied him that sheep-husbandry was exposed to no greater risks or vicissitudes than any other branch of industry, he continues, with a soundness of reasoning and force of statement which will not permit me to abbreviate his remarks, as follows:—

"The recent war changed the relations of things. The cost of labor and subsistence and taxes became so largely increased, that we could no longer compete with wool grown on as cheap lands, and by greatly cheaper labor, in other countries. We called on Congress to make foreign wools pay as much for the use of our markets as we ourselves paid. The manufacturer, ignoring old fallacies, admitted our equal right to protection, and acted as our ally. The result was the present tariff. Its effects are as yet unfelt, owing to extraneous causes. A vast surplus of foreign woollens had accumulated in our markets before its passage, which it required time to drain off. The deranged finances of a portion of the country, and the short crops of last year, have, to an unprecedented degree, depressed the woollen trade, and thus prevented that surplus from being consumed. Our manufacturers have encountered a rise in the cost of carrying on their business, corresponding with the rise in the cost of producing the raw material; and they cannot make goods to undersell the foreign ones on hand, with wool bought at a fair price. Many small mills have stopped running. The larger

ones have been run on as short time as they could be without breaking-up, scattering, and driving into other pursuits that skilled operative labor which will be necessary when they can find remunerative markets. Many of those who are able to carry their goods,—i.e., keep them on hand,—are doing so. To add to the present extreme depression of wool, the country banks, notwithstanding the money plethora in New-York City, are unwilling, and probably unable, to advance funds to country buyers, with the understanding that they will help them carry their wool over sixty days.

"Yet it was in view of all the preceding facts that we recently put forward the assertion, that we never felt stronger hopes of the future of the wool-grower than now; and we reiterate that assertion. We will give some of our reasons: The temporary causes of depression are already being removed. The crops are generally abundant; so that money will flow into the country. The cost of subsistence will diminish. The laboring classes of the North will replenish their scanty wardrobes, and the half-naked South will re-clothe itself. This will clean the market of old goods and make a place for new ones. Just how long it will take to effect this, we cannot say; but the time cannot, in the nature of things, be distant.

"For a permanent improvement in the condition of wool industry, we look to the new era which has been established in tariff legislation, and the greater promise it gives of stability in its continuance and effects. The provisions of the present act were made in what was intended to be equal reference to the interests of the three great interested parties; viz., the producer, the manufacturer, and the consumer. It gives moderate and reasonable protection to the first, without imposing a burthen on the last greater than all industries are called on to bear for the mutual support of each other. It is a triumph of no one interest over other interests. These circumstances promise stability; and any thing like stability in wise, fair, and

equal tariff legislation, is a thing we never have yet had, and what the wool-grower, more than any thing else, needs. Even imperfect legislation is better for him than ever-changing legislation.

"Other circumstances favor stability. The manufacturers gave their hearty assistance in procuring the passage of the act, and consequently are as much pledged to its support as the growers. This co-operation gives the united interests both a moral and political power which they never before possessed, and renders them more than a match for the free-traders. Manufacturing is on a much firmer pecuniary basis than formerly, and there is no danger of foreign combinations breaking down establishments which can ride out the present storm. Our markets are therefore not as likely to be broken up or disturbed by pecuniary reversions as formerly. And the grower has much better stock than heretofore. The same number of sheep, or the same feed, produces upwards of twenty-five per cent more of wool than formerly; and the improvement in this particular is still going on.

"All that we need for the future is the certainty of the present stability of the wool and woollen tariff. We have no doubt whatever that the free-traders are preparing to make a great, united, desperate onset on it, and that they will succeed unless they are met by equally determined efforts on the part of its friends. But does anybody expect that, having won this great victory of American industry, its friends will stack their arms, go to sleep, and let their defeated opponents rally and surprise them? We, for one, expect no such thing. We believe our people are sleeping on their arms, and that, when the signal sounds, they will again be prepared to rush, shoulder to shoulder, to victory. Thus, and not otherwise, our hopes are bright for the future."

Indications of the same public opinion come to us from the Far West and the East. The "Prairie Farmer," of Illinois, of

August 31st, 1867, contains a communication from its woolgrowing correspondent, who, I am authorized to state, is Mr. Samuel P. Boardman, Secretary of the Illinois State Woolgrowers' Association, from which I quote the following pertinent paragraph:—

"A. R. H. says the tariff has not helped the wool-grower the first continental; rather, he puts the language into the mouths of free-trade Congressmen. I beg to differ with him. I feel that, had it not been for the moral force exerted by the mere fact of having such a tariff, we should have seen a panic in wool matters equal to that of 1861; when the first Bull-Run battle scared manufacturers so badly, that they bought much Western wool at 28 cents per pound. He need not borrow any trouble about that tariff being knocked in the head next winter, - not if wool-growers can exert any influence. I know that is the usual course of things in the tariff legislation of our country. Congress acts like a parcel of school-boys, who put in all the noonings and recesses of two or three days, working very industriously to fashion from snow a large statue, and then, when complete, take the very next recess to knock it to pieces with snowballs. However, in this case I think the woolgrowers of the country have worked too hard, for two or three years past, to get this tariff, not to, if necessary, work still harder to keep it."

The writer concludes a humorous address to his wool-growing associates as follows:—

"In conclusion, dear friends, allow me to hope that you will gird on the armor anew, stiffen up the upper lip, pull off the coat and roll up the sleeves, feed well, breed well, take good care of your sheep; so that next year—if our tariff holds its anchor—we all may find ourselves Western Argonauts, safe in the port of Colchis, and taking off the golden fleece!"

The most influential wool-growers in Vermont are equally earnest in advocating the continuance of the present tariff policy.

The "Boston Journal," of September 14th, 1867, contains a report of a discussion upon wool, at a meeting held at the Vermont State Fair, on the 13th of September, which is spoken of as by far the most spirited and interesting of the week. It appears from the report, that, in the course of this discussion, but one speaker—a gentleman of high standing, but well known to be possessed of a mania upon the subject of the iniquities of manufacturers—opposed the present tariff, while the expressions of opinion on the other side were very decided.

Mr. Wright, of Middlebury, said "that he expected the farmers and wool-growers of the State to do all in their power to retain the present tariff. For himself, he would not knowingly vote for any man, for the State Legislature even, who was not known to be in favor of a strong protective tariff. The present tariff could not have been obtained without the aid of the manufacturers, and he believed it could not be retained without their aid. He thought that the wool-growers would gain more by being friendly to the manufacturers than they would be by fighting against them." Mr. Edwin Hammond, the famous sheep-breeder, "believed that the manufacturers, who made an agreement to act in concert with the wool-growers upon the tariff question, remained faithful to their agreement; and it was to be remembered that the present tariff upon wool, which was four cents per pound more than under preceding tariffs, was obtained through the assistance of the manufactur-He believed that the prices of wool would improve when the country became cleared of the present accumulations of wool and cloth: and, even at present prices, he could see no reason for any discouragement; for the business of wool-growing in Vermont was more profitable now than it was thirty years ago. Then the product was not more than three pounds of wool per sheep, and now it is nearly five pounds per head." Mr. Henry Clark, of Rutland, defended the manufacturers from the accusations which had been made against them of acting in bad faith with the wool-growers. "The present tariff," he said, "could never have been obtained without the aid of the manufacturers." Mr. George Campbell, of Westminster, another eminent breeder, "believed that the present tariff was a benefit to the wool-growers, that it was obtained through the assistance of the manufacturers, and that the wool-growers should cultivate a congenial feeling with the manufacturers." Mr. A. D. Smith, of Danby, said that "he was in favor of supporting the wool-growers, and urged all farmers to join with the wool-growers in keeping up the present rate of duty upon wool and cloth. People could better afford to pay high prices for the cloth they use, than to have the wool-growing business abandoned by those farmers who are now engaged in it."

The above extracts show how utterly preposterous it is to suppose that the British doctrine of free-trade in raw materials which can be produced here, still adhered to by some few manufacturers, can ever be engrafted upon our tariff policy; and they further show, that, with fidelity on our part to the principles adopted by this Association as a body, we shall have a stability in our tariff legislation never known before. Upon the assurance of this stability, there will grow up confidence in the investment of capital; new branches of manufacture, not undertaken before only for want of that confidence, will spring up; and the era of wise and just arrangements between the two great branches of the woollen interest will be the dawn of an epoch of unparalleled prosperity.

A result of the recent tariff on wool and woollens, which cannot fail to be encouraging to the wool-producing interests of the country, is the appreciation which it has tended to produce of our domestic wools. The effect of the recent tariff, in directing attention to American wools, is greater than ever anticipated by manufacturers. In all establishments where foreign wool was formerly largely used, manufacturers have

been induced to make new applications of domestic fleece which they would never have dreamed of but for the change in the wool duty. Some indication of the extent to which American wool has been substituted, is shown by importations at the port of New York, given from official sources. For the first six months of 1866, the clothing wool entered at New York amounted to 23,692,043 lbs.; and, for the first six months of 1867, 4,366,183 lbs.* To come to more direct illustrations: I am informed by a manufacturer of worsted yarns, consuming 10,000 lbs. of wool per week, that, before the imposition of the duty on Canada wool, he made use of that material exclusively for his fabrics, as it was supposed to be After the imposition of the duty, he experiindispensable. mented with American wools, selecting from lots brought principally from Kentucky; and for some months he has made use of no other wool, which he finds perfectly adapted for yarns of numbers not exceeding 35. For the higher numbers, the admixture of wools of pure English blood is found necessary. The manufacturer and introducer of the admirable cloakings, of which I shall speak elsewhere, informs me, that, upon commencing this new fabric, it was supposed that the most expensive Silesian wools would be required to equal the Austrian fabrics, which first suggested these styles. In the early stages of his manufacture, he made use of Silesian wools, costing, washed, two dollars per pound. These fabrics are now all made of American wool, without the slightest admixture of foreign material, and exhibit probably the most beautiful textures that have ever been produced from American flocks and In many mills producing fine-face goods, foreign wools were formerly used for both warp and filling. Since the change of duty, American wool, in all these establishments, is substituted for the warp, even of the finest broadcloths, con-

^{*} Statement of editor of "Sheep Husbandry" in "Rural New-Yorker," Aug. 17, 1867.

stituting two fifths of the texture. The testimony which I have from manufacturers is universal, - that, by careful selection, the economical application of American wools may be greatly extended. Instances are not wanting in other countries of a distinctly marked national manufacture being developed in consequence of the necessity of resorting to the products of domestic flocks. The high duty in France upon foreign wools, which was fixed at 30 per cent in 1826, compelled the French manufacturers of woollen dress goods to resort to the fleeces produced on their own soil. The protection given to the agriculturists of France encouraged them to develop the merino races supplied by the flocks of Rambouillet, until they produced sheep of extraordinary size, and with a length and fineness of fibre hitherto unattained. To the exclusive possession of these fleeces do the French manufacturers ascribe the unparalleled excellence of their merino-dress fabrics, — the most perfect of all known textures of wool. So high became the excellence, and so great the appreciation, of this wool, that it no longer required protection, as it was without a foreign competitor; hence the abolition of the duty on wool, which took place in 1860, was assented to freely by the French agriculturists. memory of this boon, which the flock of Rambouillet had conferred upon France, that, upon its threatened dispersion, the Empress Eugenie, in 1854, pledged herself to preserve the flock under her august protection.*

Let me by no means be understood to say, that our flocks can at present supply us with all the requisite material for our manufactures. The wools of the third class, or carpet wools, the coarse product of barbarous flocks, can never be produced here, for we might as well undertake to breed buffaloes for

^{* &}quot;In 1854, the idea was suggested to the Emperor of sending the flock to Sologne or elsewhere. Her Majesty did not fancy this proposition, and went, in company with M. Fould, to visit the merinos, and condescended to take the establishment under her august protection."—Note of Baron Daurier, Flint's Agriculture of Massachusetts, 1863, p. 186.

their robes. We are still greatly deficient in very fine shortfibred wool adapted for filling for broadcloth or face-goods, as well as in combing wool of English blood for worsteds. Both of these varieties can be advantageously grown in this country, and their production will be greatly favored by the existing These wools should be produced, not in place of, but as additions to, the wools now mainly grown, and which will be always chiefly in demand. The principal means of encouraging the growth of the required fine wools, is for the manufacturers to discriminate in their prices; and to be willing to follow the example of one of the most eminent manufacturers of fine opera flannels, who informs me that he has paid from 75 cents to a dollar per pound, while ordinary wools were worth but 50 cents, for brook-washed fleeces of this character of wool grown in Ohio. There are localities, particularly in the Middle States, where this wool can be grown to great advantage. With adequate prices, the peculiar passion for fine wool will be developed in this country, as it is in Silesia and Hungary, where the culture of noble wools, as they are denominated, is prosecuted as the most fascinating of agricultural pursuits. We notice with pleasure, that eminent flock-masters, like Mr. Chamberlain of New York, have been within the last few months adding to their importations of Silesian sheep. The diffusion of this admirable race - possessing equal fineness and shortness of fibre, but of greater size, yield, and stronger constitution, than the delicate Saxons - would be an invaluable addition to our agricultural resources. The value of sheep of English blood producing the combing wool for worsteds, is being rapidly appreciated. They are exhibited in all our agricultural fairs. Their fitness for the neighborhood of large markets, - as in such situations profit is furnished from three sources: wool, mutton, and lambs, - and their adaptation for dairy and wheat farms where small flocks can be advantageously kept, render the necessary supply of this variety of wool

only a question of time. There is no question that this wool, long claimed by the English as the exclusive product of their island, can be equally well produced here. The specimens of the Leicestershire wool exhibited by Dr. Townshend of Ohio, during the recent examination of the wool samples, were pronounced by English wool-sorters, to be equal to the choicest locks of England. In regard to these wools, Dr. Townshend says, in a recently published essay, "Should the demand for combing wool continue or increase, it can be produced in this State (Ohio), and other States on the Northern border, as cheaply and as good in every respect as it can be produced in Canada; and it cannot be good policy to import our combing wools, when they may be so readily grown at home." •

In reporting upon the condition of our own department of the woollen industry, the most important question to be answered is, To what extent have we, as manufacturers, fulfilled the obligations to the country imposed upon us by the favorable national legislation extended to us since 1862? How far have we conformed to the spirit of the resolution passed by the Government of our body, - "that the most appropriate means of testifying gratitude (for favorable legislation) is for the manufacturers to strive for the utmost perfection and soundness in their fabrics, so that consumers may recognize the benefits of protecting American industry through the increased excellence of its products"? This question we are not ashamed to answer. For a period of about five years, we have felt the influence of a protective tariff. Its operation has only been temporarily checked by the high internal revenue taxes, and by excessive importations at one period growing out of the abnormal condition of affairs consequent upon the close of the war. Sufficient time has not elapsed until the present period, to demonstrate the effects upon the public interest of the protection which the

Ohio Weekly Farmer, September 7th, 1867.

woollen manufacturers have received. Comparing our progress as indicated by the character of goods now upon the market, it is confidently asserted, that we have made more progress in the great department of clothing goods, in variety, excellence, and economy of production, than has been made here in any twenty years before. This applies to cloths in their infinite variety, shawls, flannels, blankets, knit goods, ... &c. With the single exception of the fine-faced goods, and some varieties of shawls, - an exception due solely to our deficiency in the finest wools, - our goods of clothing wool compare favorably to-day in excellence and cheapness with those of the oldest manufacturing nations. This point is difficult of demonstration, without ocular comparison of domestic and foreign goods; but a few facts may tend to illustrate it. Early last fall the Department of State requested me, as the official representative of this Association, to urge our members to contribute samples of woollen fabrics to the then approaching Paris Exposition. With this view I distributed extensively the circulars of the Department, containing the necessary instructions. A general indisposition was manifested by our manufacturers to exhibit their goods, as they evidently were doubtful of competing successfully with the old establishments of Europe. With some difficulty I persuaded the representatives of the Washington Mills, having a larger number of sets of machinery and making a greater variety of fabrics than any other American establishment, to consent to send to the Exposition specimens of their ordinary fabrics, with the express statement that the goods were not made especially for the Exhibition, but were the daily products of the mill. One of the proprietors of this establishment having been appointed a commissioner to the Exposition, objection was made by the Department of State to the transmission of the products of this mill. To obviate this objection, with the approval of the State Department, I took

upon myself, as Secretary of this Association, to exhibit over thirty distinct varieties of fabrics produced by this single establishment. They were forwarded, with a statement that they were intended to show the average styles and quality of woollen goods now being made in the United States. To each sample a card was affixed showing the selling price in this country. These fabrics received, in my name, the award of a silver medal, being a medal of the highest class given to any individual or establishment manufacturing carded wool. informed by a member of the jury consisting of representatives from all the manufacturing nations in the world, that the jury in making this award, had regard to the excellence, variety, and fitness for general consumption of these fabrics, and also to the reasonableness of the prices at which these goods were afforded in this country. Such an award is conclusive proof, that the American manufacturers in this department are discharging their obligations to the consumers of this country. Upon the question of prices, I will repeat here what I have said in a recent publication, entitled "Protection a Boon to the Consumer:" "A careful inquiry among the most experienced and oldest dealers justifies the assertion, that clothes, as a whole, have never been so cheap in this country as at the present time. It is the opinion of the oldest dealers whom I have consulted, that in certain styles where comparison can be made, such as black broadcloths and cassimeres, the prices of American cloths are much less than foreign cloths of the same quality forty years ago. The present great reduction of prices may be temporary; as many goods are doubtless offered below the cost of production, and the want of protection to other branches of industry doubtless diminishes the demand. In any view of the case, there can be no question that the cost of cloth, to the great class of American consumers, has been materially diminished by the domestic manufacture."

During the war, the standard of excellence in our goods was

undoubtedly far too low, and discredit was thrown upon our national production. Home competition, the inevitable result of protection, is now for excellence; and the vast improvement exhibited the present year is the subject of universal comment and surprise with the leading merchants. The leading organ of the dealers in dry-goods—the "Economist," a well-known free-trade advocate - declares as follows: "It can be truly said of our manufacturers this season, 'they have made wonderful progress over last year.' Such continued improvements in the manufacturing of woollen goods will soon place us beyond the name of rivals, and cause our products to be imitated the world over; as our most choice styles and salable patterns are the result of American ingenuity, both in coloring and in style." As the admissions of an opponent are legitimate testimony, we may fairly quote in this connection the declaration of the same organ, that "a great impulse has been given to domestic manufacturers under the influence of the high tariff, and the result is seen in the splendid display made by our woollen mills."

Our progress has not been limited to improvements of old fabrics in style or economical production. Many new fabrics have been successfully achieved. Among the notable examples of recent introductions, may be specified the silk-mixed cloths, having threads of silk incorporated with both the warp and filling; adding strength to the texture, and giving agreeable neutral shades to the surface. It is admitted that the American products of these goods, which are largely consumed, fall short in no respect of their German prototypes. The introduction of these goods is interesting, as aiding in the development of a kindred branch of American manufactures, all the silk used in these goods being spun in this country. The consumption of silk is by no means inconsiderable, that consumed by one manufacturer, for this class of goods, exceeding annually \$80,000 in value. The silk and wool manufactures are united

in another fabric of great beauty, largely made in Connecticut,—the Irish poplins, composed of worsted filling, which is covered completely by a warp of silk. This beautiful addition to our products of luxury, it is hoped, is the harbinger of a broader extension of the silk manufacture, which needs only sufficient protection to take its place in this country with the manufactures of wool and cotton.

The great perfection which we have attained within the last two years in the manufacture of the class of cloths styled Esquimaux beavers, for overcoatings, is worthy of especial commemoration. Five years ago, all the goods of this class, consumed in this country, were imported. The cheapness and excellence of the goods of this class recently fabricated here, have led to the exclusion of the foreign product. The goods of this class, manufactured by the Germania Mills, exhibited at the Paris Exposition, received the award of a medal of high class.

Marked improvements have been made within the last year or two in the production of knit goods. Until quite recently, the manufacture of shaped stockings, shirts, and drawers, made abroad wholly on hand machines, has not been attempted here. An American machine now performs automatically the narrowing and widening of the best class of knit goods, which is done elsewhere by hand. A great difficulty in the manufacture of knit goods has been the seaming, which, when done by hand, involved the distribution of the work to the homes of the skilled women by whom the work was finished at great cost. Within the last year, a machine has been perfected by American ingenuity for seaming automatically. In one establishment, a hundred little girls are employed on these machines, earning from half a dollar to a dollar a day, and accomplishing the seaming more perfectly than it was ever done by hand. Thus a completely shaped knit article is produced entirely by power, equal in all respects to the goods of the most celebrated English makers; while they are afforded at materially reduced prices.

Of recent novelties in our manufacture, the fabrics which have attracted most admiration are the cloakings, so largely introduced during the present season. Even experienced manufacturers are astonished by the new range which is given to the application of woolly fibre, by the surprising variety of styles and effects obtained, and that they are capable of being produced by machinery. The models which gave the idea of the fabrics produced here, originally conceived and executed in Austria, under a protective system of over seventy per cent, first appeared at the London Exposition in 1862, and were regarded as marked features of the Exposition. To the genius and enterprise of a young manufacturer of Rhode Island, is due the conception of reproducing the Austrian inventions in this country. He was able to carry his conception into practical execution, by personal observation and actual labor in the Austrian mills. Not content with imitation, he introduced new styles and textures adapted to American wool: and the goods now produced by him, and by other manufacturers who have followed his example, although purely American in design, are in no respect inferior to the foreign models; while they are sold at from two to three dollars less than the prices at which the inported goods can be afforded, — the American goods being woven by machinery, while the Austrian goods are woven by hand.

While, in the department of clothing-wool fabrics, every field seems to have been explored in this country, that of combing-wool is still limited by the want of raw material. We have encouragement in this direction, from the successful working of mills in Rhode Island and elsewhere, producing Italian cloths; and the establishment of another in Lawrence, within the last year, for the manufacture of styles of worsted dress goods not before attempted. I am confirmed, by the opinions

of several manufacturers, in the belief, that there is a favorable opening for a new application of our longest-fibred American merino wool, in the production of the fine all-wool merino dress-stuffs, produced at present only in Europe; but so largely produced there, that, in a single establishment in Reisenberg, Bohemia, 12,000 persons are employed in this manufacture. As these goods are admirably adapted for printing, the introduction of this manufacture would be greatly favored by the perfection to which the art of cotton and delaine printing has attained in Rhode Island and Massachusetts.

Before closing this Report, it is proper that I should consider, very briefly, the direction in which improvement in our industry should be sought. In practical manufacture, I am led to believe that the great field for improvement is in the selection, adaptation, and preparation of wool. All are aware of the vast economy which is now effected by the saving in stock, as compared with the practices thirty years ago. of our number, who visited a great manufactory of the finestfaced goods, at Aix La Chapelle, states, that, in that vast establishment, they find it economical to wash in two months all the wool worked during the year, thus losing the interest on their stock for a large part of the year; for the simple reason, that the softness of the water during those particular months favors thorough cleansing. In the same establishment, the manipulation of every lock of the wool, to remove even the least foreign matter, is carried to a degree which would seem excessive here. Another manufacturer states, that his recent observations in a great worsted establishment of Roubaix, - the centre of the combing-wool industry of France, - as to the refinement of care and skill exercised in the selection, adaptation, washing, and preparation of the wool before spinning, led him to believe that the most important economy in this country was to be found in the same direction.

Without presuming to make any other practical sugges-

tions, I will refer to only one other direction in which improvement is desirable. The manufacturers of woollens, as a class, to acquire the highest excellence, need more persistency of purpose, and devotion to one maturely adopted line of fabrication. Our manufacturers are too often seduced by the importunity of their selling agents or the impatience of stockholders, to be diverted from the field of production which they have first occupied to some other in which a fellow-manufacturer appears to be gathering a richer harvest. The result is an evil of which all complain, -an over-production in certain classes of goods; an evil which has no relief, as in Europe, by sending overplusses abroad. As the changes are usually made without requisite skill and experience, the rivalry too often is not in excellence, but in cheap production, or in the sale of goods without regard to profit. Another result, therefore, is the lowering of the standard of goods. Unless this tendency is checked, it is impossible to have that national excellence to which we should aspire. All the experiences of common life show, that persistency of purpose in any judiciously considered pursuit is certain to be crowned with success. In the production of all the standard goods, there are still higher skill to be developed, economies to be introduced, delicate judgment to be cultivated, and, more than all, a reputation to be won; which effects are sure to result from persistency of purpose in one line of manufacture. It is only by such persistent labor that we develop manufacturing, instead of simply pursuing it, so that the country and the world advance by our efforts. I need not mention, for you will all recall them, the men and the establishments in our country that have achieved fortunes and added to the national honor by persistent following of an unattained ideal. But I may refer with propriety to the great European names in our department, - such as Liebig and the Trinklers of Bohemia, Zschille of Saxony, Simmonies and Biolley of Vervais, Bauer of Brun, Chenviere and Legris of

Elbeuf, Salt of Saltaire, and Norton of Huddersfield,—who take rank with the princes of Europe, not because they are manufacturers simply, but creators of manufactures, founders of industries which occupy the people and enrich the world. Let such men, at home and abroad, be the examples of this Association, and it will be worthy of the name it bears, and be honored as a truly "national" institution.

Respectfully submitted,

JOHN L. HAYES, Secretary.

RESOLUTIONS

Passed unanimously at the Third Annual Meeting of the "National Association of Wool-Manufacturers."

Resolved, by the "National Association of Wool-Manufacturers," at its third annual meeting, held in the city of New York, on the 2d of October, 1867:—

- 1. The present tariff on wool and woollens is as well adapted as any legislation which can now be devised, to promote the growth and development of wool-manufacturing and wool-growing, and the interests of consumers and the public revenue.
- 2. Confidence in the stability of legislation being essential to induce the investment of capital by which agricultural and manufacturing wealth is to be developed, it is of the highest importance that the tariff policy, deliberately adopted at the suggestion of those most affected by it, should be persisted in, and that the business arrangements which have been made to conform to it should not be disturbed.
- 3. Experience having demonstrated the difficulty of adjusting the complicated relations of manufacturers with each other and with the producers of wool, it is desirable that no change, however trivial, should be made in the present tariff, unless sanctioned jointly by the National Wool-growers' and Manufacturers' Associations.
- 4. The interests of wool-manufacturers and wool-growers being recognized as identical, further measures should be adopted to make each class familiar with the respective wants and necessities of the other.

- 5. Manufacturers have suffered from over-production of particular kinds of goods; wool-growers have equally suffered from over-production of certain kinds of wool: the wisest course for each class to adopt is to increase the variety of its products.
- 6. It would greatly benefit many branches of the woollen manufacture, if, in addition to the ordinary wools now produced, there should be an increase in fine wools corresponding to the best Silesian wools, and in combing-wools of English blood.
- 7. It is for the interest of the whole country that production should be increased, by extending protection to all branches of industry whose representatives can show that they are not in a position to successfully compete with foreign producers.

ORGANIZATION

OF THE

National Association of Wool Manufacturers,

For the year commencing October 2, 1867.

PRESIDENT.

ERASTUS B. BIGELOW Boston, Mass.

VICE-PRESIDENTS.

T. S. FAXTON Utica, N.Y.

THEODORE POMEROY PITTSFIELD, Mass.

ARCHIBALD CAMPBELL Manatunk, Pa.

TREASURER.

[To be appointed by the Government, the gentleman elected at the Annual Meeting being unable to serve.]

SECRETARY.

JOHN L. HAYES Boston, Mass.
DIRECTORS.

Maine

R. W. Robinson, Dexter.
Galen C. Moses, Bath.
Thomas S. Lang, North Vassalboro'.
J. H. Burleigh, South Berwick.

New Hampshire.

D. H. BUFFUM, Great Falls. DANIEL HOLDEN, Concord.

Vermont.

S. WOODWARD, Woodstock. SETH B. HUNT, Bennington.

Massachusetts.

E. R. MUDGE, Boston.
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JOSHUA STETSON, Boston.
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AUGUST STEUSBERG, Holyoke.

Rhode Island.

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Connecticut.

J. CONVERSE, Stafford Springs.
B. SEXTON, Warehouse Point.
GEORGE MAXWELL, Rockville.
GEORGE ROBERTS, Hartford.
CHARLES C. BETTS, Winnepauk.

New York.

J. S. Knowlson, Troy. Charles Stott, Hudson. L. J. Stiastny, New York.

New Jersey.

WILLIAM DUNCAN, Franklin. DAVID OAKES, Bloomfield.

Pennsylvania.

S. W. CATTELL, Philadelphia. GEORGE BULLOCK, Philadelphia. JOHN COVODE, Lockport Station. CHARLES SPENCER, Germantown.

Maryland.

CHARLES WETHERED, Baltimore.

Ohio.

ALTON POPE, Cleveland.

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Statistics.

JOHN M. PENDLETON, New York, N.Y. JAMES ROY, West Troy, N.Y. ARCHIBALD CAMPBELL, Manayunk, Pa. N. KINGSBURY, Hartford, Conn. J. V. BARKER, Pittsfield, Mass.

Raw Material.

GEORGE WM. BOND, Boston, Mass. H. D. TELLKAMPF, New York, N.Y. JESSE EDDY, Fall River, Mass. SAMUEL LAWRENCE, New York, N.Y. J. J. ROBINSON, ROCKVIlle, Conn.

Machinery.

L. T. Downes, Providence, R.I. RICHARD GARRED, Frankford, Pa. J. K. KILBOURN, Pittsfield, Mass. C. H. Adams, Cohoes, N.Y. ROBERT MIDDLETON, Utics, N.Y. Worsted Princettas.
Alepines.
Queen's Cloth.
Worsted figured Russells.
Union " "
Silk warp " "
Worsted Serge de Berrie.
Union Serge de Berrie.
Union Serge de Berrie.
Shalloons.
Plain Shotts.
Figured striped Shotts.
Says, stout make.
Says, Merino make.

Mixed Stockinetts.
Grandville "
Webbings.
Summer Cloths.
Stout Orleans.
Deumark Latteens.
Wildbores.
Tammies.
Tournay Cloths.
Chipa Cloth.
Pelliones.
Ponchos and Mantas.
Yergas.

The importance of the manufacture is evinced by the fact, that the worsted manufacture employed in England, in 1856, 87,794 persons; while the cardwool manufacture employed only 79,091. In France, this industry employed, in 1851, 300,000 persons. In this country, in 1860, less than 3,000 were employed. Worsted goods constitute the largest part of our importations. Of sixty millions of woollens and worsteds, forty millions were of worsted alone.

The manufacture of worsteds, which is just begining to have an important development in this country, owes its existence to the Reciprocity Treaty, which admitted, free of duty, the wools of Canada. The farmers of Upper Canada, of English and Scotch descent, naturally prejudiced in favor of the sheep husbandry which prevails at home,—as England is still called in the colonies,—and having a taste for English mutton, imported sheep of the Leicester, Cotswold, and Down races, which have thriven admirably on the naturally rich limestone soils of Upper Canada.

STATEMENT OF FACTS

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BELATIVE TO

CANADA WOOLS

AND THE

MANUFACTURES OF WORSTED.

BOSTON:

PRESS OF JOHN WILSON AND SONS. 1866. The amount ascertained to have been used in other mills not included in this estimate, will carry the present yearly consumption of Canada wools to at least four million pounds.

As the American production of worsted combingwool is not sufficient to supply one mill, if the treaty should not be renewed, or some provision be made for the free admission of Canada wools, the worsted manufacturer will be compelled to pay the whole of the present high duty on wools, of the class consumed by him, from which his foreign rival is exempt.

The wool adapted to the worsted manufacture cost now in Canada, in gold, from forty to forty-five cents. The duties, under the present tariff, are on wools over thirty-two cents, twelve cents, and ten per cent ad If the present tariff should operate on Canada wools, the duties on wools commonly used at present prices would range from forty to thirtyseven per cent. It is shown by the sworn statements of manufacturers submitted herewith, that these duties on the raw material, together with other neutralizing duties, such as the internal revenue tax, would reduce the nominal protection of from thirty-five to fifty per cent; the duty on foreign worsteds, to an actual protection ranging from zero to only four per cent. It is vain to suppose that worsted manufacture can be continued or increased under such disadvantages.

A duty on Canada wools would crush an industry which has already assumed a truly national importance, and has advanced with a rapidity unexampled in any

STATEMENT OF FACTS

RELATIVE TO

CANADA WOOLS

AND THE

MANUFACTURES OF WORSTED.

National association of und manufacturers!

BOSTON:

PRESS OF JOHN WILSON AND SONS.

1866.

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To Hon. Stephen Colwell,

U.S. Revenue Commission, Philadelphia,

SIR,

The undersigned, Members of the Executive Committee of the National Association of Wool Manufacturers, have the honor to submit to you, as the member of the Revenue Commission specially entrusted with the consideration of the questions of revenue applicable to wool, woollens, and worsteds, the following "statement of facts relative to Canada wools and the manufactures of worsted," prepared by the Secretary of the Association above named, and to commend the facts and views therein presented to your special attention.

We have the honor to be, very respectfully, your obedient servants,

E. B. BIGELOW,
T. S. FAXTON,
EDWARD HARRIS,
J. W. EDMANDS,
N. KINGSBURY,
THEODORE POMEROY,
S. W. CATTELL,

Executive Committee, fc.

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NATIONAL ASSOCIATION OF WOOL MANUFACTURERS, OFFICE, 55, SUMMER STREET, BOSTON, MASS., Jan. 18, 1866.

To the Executive Committee of the National Association of Wool Manufacturers.

GENTLEMEN, — I have the honor to call your attention to a statement of facts in relation to the demand for consumption in American manufactures of the class of wools known as "combing-wools," as distinguished from card or cloth wools.

The former class are wools specially fitted for the process of combing by hand or machinery, which consists in drawing out the fibres, so that they may be straight and parallel; the shorter portions called "noils" being removed by this operation. The fibres having been rendered straight and parallel, are twisted, and the yarn is called worsted. The ends of the fibre being covered by the process of spinning, the yarns are smooth and lustrous.

Card or cloth wool is wool fitted for being carded. By this process the fibres are placed in every possible direction in relation to each other, adhering by the serratures of the fibre, which are more numerous in the wool fitted for carding. They are thus fitted for felting, and the ends of the fibre are free to be drawn

out into the nap. While card wools are required to be fine, short in staple, and full of spiral curls and serratures,—qualities possessed by wools of which the merino and Saxony wools are types, — the combingwools, on the contrary, must be long in staple, from four to seven inches in length, comparatively coarse, having few spiral curls and serratures, and possessing a distinct lustre. These qualities are possessed in perfection by the English sheep of the Lincolnshire, Leicester, and Cotswold races; and, in a less degree, by the Cordova wools of the Argentine Republic, and the Donskoi wool of Russia. Comparatively long fine wools of the merino race, from two and a half to three inches in length, are combed for making delaines and similar fabrics; but they are not classed in the trade as combing or worsted wools.

An unprecedented demand for these wools has arisen in all manufacturing nations within the last ten years, and the prices have more than doubled in that period. This is due, first, to the vast improvements in combing by machinery made within the past fifteen years; secondly, to the late scarcity of cotton; and, thirdly, to the introduction of fabrics from alpaca wool; and the discovery that by the use of cotton warps, with a filling of combing-wool, an admirable substitute might be made for alpaca fabrics. There is an immense demand for these fabrics for female wear.

The goods manufactured from combing-wools, or worsteds, are alpaca fabrics, poplins, grenadines, and an infinite variety of fabrics for female wear, the consumption of which is constantly increasing; the contexture and patterns of the fabrics can be changed indefinitely to suit the caprices of fashion, and they constitute the great bulk of the class known as "novelties;" furniture goods, moreens, damasks, reps, mohairs, &c.; hosiery goods, such as zephyrs, nubas, &c.; braids, bindings, bunting, webbing for saddlery and suspenders. Carpets are made from coarse and cheap combing-wools; the white yarns being made from Canada wool. It is the opinion of manufacturers, that the finer classes of carpets could be made wholly of Canada wool with advantage.

The vast variety of fabrics, included in the worsted manufacture is illustrated by the following list of goods professed to be made by one firm in Bradford, the seat of the worsted manufacture in England:—

Amiens. Alpaca Lustres. Figured Lustres. Buntings. Camblets, — Mexican make. Dutch make. East India and China make. Cambletees. Worsted Crapes. Union Mixed Grandville " Cotton warp Cubicas. Crape Coatings. Cobourgs: Shawl Cloth. Plain Backs.

Worsted Stockinetts. Worsted Damasks. Union Merino Worsted Dobbies. French Figures. Worsted full Twills. Cotton warp Grograms or Russel Cords. Plain and Fancy Gambroons. Linings. Italian Crapes. Worsted Lastings. Moreens. Mohair Figures. Lustre Orléans. Figured Orleans. Cotton warp Orleans.

protection, suggest another mode of affording relief to the worsted manufacturers. The alternative plan is therefore suggested, if a duty shall be imposed upon Canadian wools, of placing an additional duty upon manufactures of worsted, sufficient to be countervailing against the duty on the wool. This plan would be in harmony with the principles upon which the present tariff laws are based. It is believed that such an additional duty would not materially check importations, and would add largely to the revenue.

I have the honor to be, very respectfully, your obedient servant,

JOHN L. HAYES, Secretary.

APPENDIX.

To the United-States Revenue Commission.

The undersigned representatives of ______ companies engaged in the manufacture of worsteds, viz., Samuel Fay, Superintendent of the Lowell Manufacturing Company; Allan Cameron, Agent of the Abbott Worsted Company; O. H. Moulton, Agent of the Hamilton Manufacturing Company,— respectfully submit the following statement in regard to the manufacture of worsteds:—

Worsted yarns of the finer grades were made in this country only to a very limited extent, prior to 1860 or 1861, except for delaines; the yarns manufactured, prior to that, being principally designed for carpets. The introduction of the manufacture of the finer worsted yarns is due to the command of Canada wools admitted free under the reciprocity treaty. Yarns for the west of worsted stuff goods are made of long lustre combing wools, such as are grown upon sheep known as Leicestershire, Cotswold, and similar breeds, raised in England and Canada.

Other worsted fabrics are made with warps manufactured from wool described above, and weft made from the longest merino wool. Machinery, specially adapted for manufacturing worsteds from long combing wools, has been imported from England, and is adapted for no other purpose; so that, if the raw material is wanting, the machinery must be idle. The Canada wools, used for making worsted in this country, are fully equal to the English combing wools; and the fabrics made in this country are equal,

The amount ascertained to have been used in other mills not included in this estimate, will carry the present yearly consumption of Canada wools to at least four million pounds.

As the American production of worsted combingwool is not sufficient to supply one mill, if the treaty should not be renewed, or some provision be made for the free admission of Canada wools, the worsted manufacturer will be compelled to pay the whole of the present high duty on wools, of the class consumed by him, from which his foreign rival is exempt.

The wool adapted to the worsted manufacture cost now in Canada, in gold, from forty to forty-five cents. The duties, under the present tariff, are on wools over thirty-two cents, twelve cents, and ten per cent ad valorem. If the present tariff should operate on Canada wools, the duties on wools commonly used at present prices would range from forty to thirtyseven per cent. It is shown by the sworn statements of manufacturers submitted herewith, that these duties on the raw material, together with other neutralizing duties, such as the internal revenue tax, would reduce the nominal protection of from thirty-five to fifty per cent; the duty on foreign worsteds, to an actual protection ranging from zero to only four per cent. It is vain to suppose that worsted manufacture can be continued or increased under such disadvantages.

A duty on Canada wools would crush an industry which has already assumed a truly national importance, and has advanced with a rapidity unexampled in any branch of our textile manufactures. It is shown by the statements under oath of four leading manufacturers herewith submitted (see statement of Samuel Fay and others), "that worsted yarns, of the finer grades, were made in this country only to a very limited extent prior to 1860 or 1861, except for delaines. The introduction of the manufacture of the finer worsted yarns is due to the command of Canada wools, admitted free under the Reciprocity Treaty. We estimate the capital, now employed in the manufacture of the various kinds of worsted goods, at eight million dollars; and the yearly value of the product, at not less than ten million dollars. We do not hesitate to say, that, in our opinion, the whole of this manufacture is dependent upon the supply of Canada wool; and that, if Canada wool should be subjected to duties ruling under the present tariff, the greater part of this manufacture would be suspended."

Mr. Morse, a leading manufacturer of braids, says, in his sworn statement, herewith submitted: "The first manufacture of worsted braid in this country was commenced, in 1860, with sixteen English machines. We estimate that three thousand machines for braiding worsted are now in operation in this country, that the operation of these machines requires a capital of one million dollars, and that the annual value of the product is three millions. With the present supply of yarns, and the present machinery, it is impossible to supply the demand. • We have orders to-day for a hundred thousand dozen of braids ahead of our production. The existence of this manufacture

is wholly dependent upon the supply of Canada wool."

If the manufacture of a single article of the hundreds which may be made from these combing-wools is so important, there can be no doubt of the correctness of the estimate made by one of the most experienced observers of the American wool market, Mr. Bond, who stated, at the Syracuse Convention, that "we should readily and promptly consume in this country not less than twenty million pounds of such wools, if we had the supply."

The adoption of a policy which would overthrow this most promising of all our textile manufactures, can be warranted only by unquestionable countervailing advantages to American producers,—the woolgrowers, for example.

Excluded as the wool-growers of the West especially have been from communication with Eastern manufacturers, and uninformed, like most others in the community, of the peculiar uses to which these wools are applied, it is quite natural that their first impression should be unfavorable to the free admission of Canada wools. It is believed, however, that a candid consideration of the facts will convince even our Western farmers, that no possible advantage to the wool-growers of the United States can accrue from a duty on Canadian wools. They do not, in fact, compete with the wools now produced in this country. It is safe to say, that not 300,000 pounds of combingwools are produced in the United States; and we export to Canada for her mills a much larger quantity of our fine wool. That this estimate is large is shown by statistics of Ohio, the largest sheep-growing State in the Union, and furnishing about one-sixth of our whole production. The whole number of sheep in Ohio, in 1862, as shown by the agricultural reports, was 4,448,227. The number of Cotswold and Leicester sheep, producing combing-wool, is set down for 1863 at only 3,324, which, at seven pounds per fleece, produced 23,268 pounds of wool. This multiplied by six, the proportion of sheep in the rest of the United States to Ohio, would make the whole product of combing-wool 139,592 pounds.

It is believed that combing-wools can be grown with great advantage in this country, particularly since the enormous relative increase in price of these wools; and it is believed that much incidental benefit will accrue to the country from the improvement in mutton and lambs which will be effected by the culture of long-woolled sheep. But the inducement for growing this wool must come principally from the demand of our manufacturers. Check the worsted manufacture, and there will be no hope of introducing this species of sheep-husbandry, which is one of the most important sources of the agricultural wealth of England.

The American producer of fine wool may need protection against the fine wool of Australia and La Plata, produced by cheaper labor. But the cost of production of combing-wools in Canada, and similar districts in the United States, would be nearly equal, the cost of labor being nearly the same. The American who

goes into the production of combing-wools near the great cities, the only situation where this wool will be likely to be raised, will have the advantage in having his wool, mutton, and lambs nearer the market. American production of combing-wool will probably never be repressed by Canadian competition; while the Canadian supply will keep the mills running, which will make a demand for wool for both the Canadian and American. Canadian sheep husbandry will not compete with American fine-wool husbandry; for the latter differs from the former as much as it does from Fine-wool husbandry is adapted to the pork-raising. prairies of the West, and the hill-sides of the Alleghanies, where the sheep are raised for wool principally, in flocks of a thousand or more; and the sheep The long-wool husare not killed till they are old. bandry is adapted to stall-feeding or high farming in the neighborhood of the great markets, where there is a sale for fat mutton and early lambs, the wool being only the accessory. The sheep are kept in small flocks, and are killed as soon as they reach maturity.

The encouragement of the worsted manufacture by means of free Canada wool, would, in fact, benefit the American wool-growing interest by increasing the demand, and consequently the price, of the kind of wool at present most in favor with the American producer: I mean the heavy Vermont merino fleece. This wool, on account of its strength and superior length, is admirably fitted for soft stuff-goods for female wear, the manufacture of which is carried on in England

and France, in the same establishments which work the combing-wools; for the products, being fitted for the same consumption, can be put on the market The mills in this country which have lately introduced the manufacture of Alpaca fabrics from Canada combing-wools, have at the same time introduced the manufacture of Coburgs, a kind of soft stuffgoods from the American merino fleece. I can point to the establishments of the Lowell Manufacturing Company and the Pacific Mills, where both classes of fabrics are made. To introduce the manufacture of stuff-goods into this country, now our greatest necessity, the supply of both kinds of wool is necessary, and the demand for the long combing-wools will certainly create an equally increased demand for the peculiar wool of the American merino. It is working exactly so in England at the present time. The price of English combing-wool is now unprecedented, while that of cloth wools remains stationary. At the last quarterly sales in December, Australian merino combing-wools, analogous to Vermont merino wools, advanced fourpence a pound.

If these views are correct, there remains but one argument for imposing a duty on Canadian wools,—the necessities of the revenue. But it is evident, that the American manufacturer cannot import and pay the onerous duty which will be operative under the present tariff; and it is equally evident, that the loss to the internal revenue by diminishing the manufacture will be greater than any gain from a duty on wool.

The imposition of duty on Canadian wool would therefore be a suicidal act, justified by no possible advantage; and would be a concession, not to our farmers, who would suffer by the act, but to mere popular prejudice. It would be an act of bad faith to the manufacturers who have erected expensive establishments, and imported costly machinery, upon which they paid a duty of over forty-five per cent in gold, upon the faith that treaty stipulations would have a permanence not expected in legislative provisions.

It is true that Canada derives great benefit from selling her wools in this country at fifty cents a pound; but how much greater benefit do we derive from employing them to nationalize a great manufacture in this country! It was a benefit to the English wool-growers, for two or more centuries, to send all their combing-wool to Flanders; but Flanders, by the command of the wool of England for her manufactures, became the richest commercial nation in Europe. In the supply of wool, Canada is to us what England was to Flanders before the time of Edward III., who kept his wool at home; and what Ireland is to England now, and what England desires all the world to be to her besides. We wish to apply to Canada the lesson which England has taught us; and it is not our fault that Canada is also pressing for the freedom to export her raw material, and is blind to the obvious fact that such a policy will always keep her impoverished and dependent.

These views are presented with the conviction that

the American producer of wool will derive no possible advantage from a tax on Canadian wools; and they are presented with the distinct admission, that, if the American wool-grower can furnish reasonable evidence that a duty on Canadian wools will aid his production, he has a right to demand it, and we are bound to concede it.

The American consumers of Canada wool do not desire to complicate the matter in which they are specially interested, with the question of the termination or renewal of the Reciprocity Treaty. But, in case of its termination, they feel justified by the foregoing facts in asking, that Canada wools, by a special legislative provision, may be admitted free of duty. a provision for admitting combing-wools only, would be objectionable on account of the practical difficulty at the custom-house in determining what are combing-wools; for portions of some fleeces may be selected for combing, while other portions may be used for carding. But so little carding-wool will be received, the Canadians not producing enough card wool to supply their own mills, that it would be better to submit all Canadian wools to the same provision.

The above proposition is made upon the consideration, that the simplest mode of preserving the worsted manufacture is to continue the system under which it has grown up. But the popular prejudice against any form of free trade with the British Provinces, and the consideration that the advocacy of the above plan may be an apparent abandonment of the principle of

protection, suggest another mode of affording relief to the worsted manufacturers. The alternative plan is therefore suggested, if a duty shall be imposed upon Canadian wools, of placing an additional duty upon manufactures of worsted, sufficient to be countervailing against the duty on the wool. This plan would be in harmony with the principles upon which the present tariff laws are based. It is believed that such an additional duty would not materially check importations, and would add largely to the revenue.

I have the honor to be, very respectfully, your obedient servant,

JOHN L. HAYES, Secretary.

APPENDIX.

To the United-States Revenue Commission.

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in all respects, to imported fabrics. There is a demand for all that can be manufactured from the present machinery.

We estimate the capital now employed in the manufacture of yarns and the various kinds of worsted goods at \$8,000,000, and the yearly value of the product of worsted goods at not less than \$10,000,000,—this exclusive of manufacture of delaines, in which American merino wools are used with the shorter Canada wools.

We do not hesitate to say, that, in our opinion, the whole of this manufacture is dependent upon the supply of Canada wool; and that, if Canada wool should be subjected to duties ruling under the present tariff, the greater part of this manufacture will be suspended.

Samuel Fay, Sup't Lowell Manf'g Co. O. H. Moulton, Sup't Hamilton Manf'g Co. John C. Morse & Co. Allan Cameron.

STATE OF MASSACHUSETTS, COUNTY OF SUFFOLK, \$85.

Sworn to and subscribed before me, the 13th day of January, 1866.

FRANCIS S. DYER,
Notary Public.

To the United-States Revenue Commission.

THE undersigned, John C. Morse & Co., of Massachusetts, respectfully represent, that we are engaged in the manufacture of worsted braids, at Attleborough, Mass. We have employed at our establishment an average of five hundred machines all the time. With that quantity of machinery running, we can manufacture braids of the value of \$800,000 per annum, which value we are, in fact, now manufacturing; and we expect to manufacture a

value of \$1,000,000 per annum. These braids are made of worsted yarns spun from Canada wool. The machines for braiding which we use are of American invention, made expressly for manufacturing worsted braids in this country, and are great improvements upon English machines; being simpler, and costing about half the price, and taking but half the power to work them.

The first manufacture of worsted braid in this country was commenced in 1860, with sixteen English machines. We estimate that three thousand machines for braiding worsted are now in operation in this country, that the operation of these machines requires a capital of one million dollars, and that the annual value of the product is three millions.

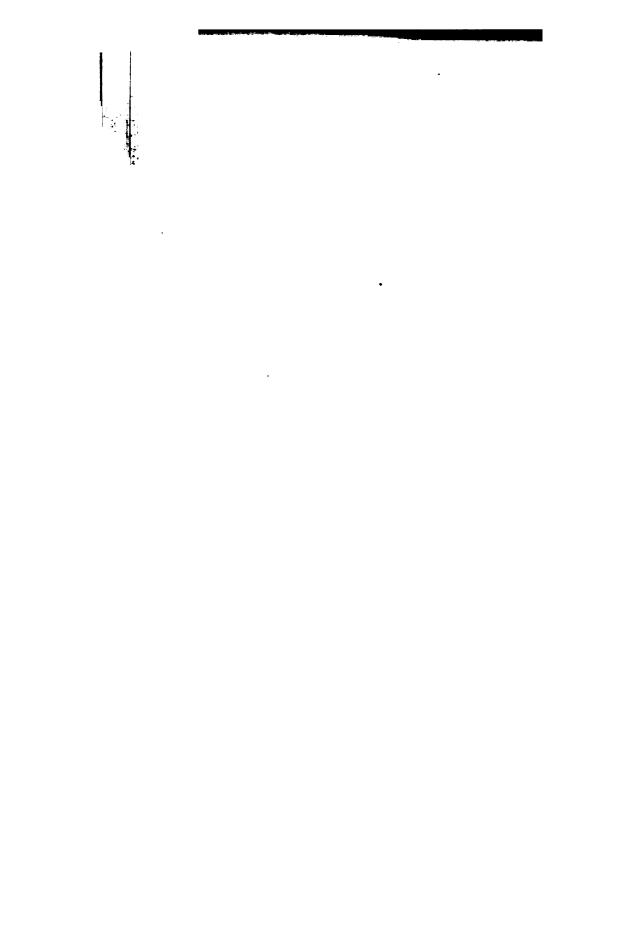
The existence of this manufacture is wholly dependent upon the supply of Canada wool. The American yarns made of Canada wools are superior for the manufacture of braids to the English yarns.

JOHN C. MORSE & Co.

STATE OF MASSACHUSETTS, COUNTY OF SUFFOLK,

Sworn to and subscribed before me, this 13th day of January, A.D. 1866.

FRANCIS S. DYER, Notary Public.





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LETTER

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EXHIBITING THE

CONDITION AND NECESSITIES OF THE KNIT-GOODS MANUFACTURE,

ADDRESSED TO

HON. JUSTIN S. MORRILL,

CHAIRMAN OF COMMITTEE OF WAYS AND MEANS,

MAY, 1866.

BOSTON:
PRESS OF JOHN WILSON AND SONS.
1866.

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LETTER

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CHAIRMAN OF COMMITTEE OF WAYS AND MEANS,

MAY, 1866.

\$BOSTON:\$ PRESS OF JOHN WILSON AND SONS.



Hon. JUSTIN S. MORRILL,

Chairman of the Committee of Ways and Means,

U.S. House of Representatives.

SIR,—The undersigned have been appointed by the "National Association of Knit-Goods Manufacturers" a Committee to present to you a statement of the present condition and necessities of the hosiery business in this country. In the brief time allotted to us, largely occupied by current engagements, it has been impossible to collect full statistics as to the business; and we shall aim to do nothing more than to present such facts as will serve to give a general impression of the national importance of this industry, and of its claims to the fostering care of the national Legislature.

The knitting industry is employed in the manufacture of goods which are classed under the general denomination of hosiery, consisting chiefly of stockings, socks, shirts, drawers, braces or suspenders, gloves, caps, shawls, &c., made of wool, cotton, or silk, an elasticity being given to the fabric by knitting, which is not found in woven goods. The knitting industry is quite recent in its origin, compared with that of weaving. It dates back no later than the invention of the stocking frame by the Rev. William Lea, of Cambridge, England, in 1585. Previous to this time, women, even of the superior classes of society, wore cloth hose,—cloth fitted, and sometimes rudely so, to the leg, and either gartered (as in the case of the Countess of Salisbury), or laced or buttoned; while for men, wearing breeches reaching to and fitting the foot, the use of stockings was unnecessary.

The knowledge of the art of knitting by hand was confined to few persons; and it is related that a pair of knit silk stockings, manufactured in Spain and presented to Queen Elizabeth, were worn by her as an article of rare luxury. Lea failed to introduce his machines in England, and carried them to France, from whence they were brought by his workmen to Nottinghamshire in England, where the manufacture was successfully established and still flourishes, as well as in the counties of Derbyshire and Leicestershire: this trade employing in England upwards of eighty thousand individuals, the entire manufacture being estimated by Mr. Simmonds, in 1860, at £4,000,000 annually; the value of declared exports in 1858 being £1,015,693.

The manufacture of knit goods, scarcely known in this country before 1844, and at that time having a value not exceeding forty thousand dollars, received the great impulse to which it owes its recent development during the late war, from the scarcity of goods and the high prices of gold and exchange, which gave a protection never before enjoyed. Capitalists and manufacturers were thus induced to attempt the production of the finer classes of hosiery, never before undertaken. Prior to the war, the business of knitting was confined almost exclusively to low-priced heavy goods, and to fancy hosiery, in which the superiority of American taste, and the adaptation of goods to the peculiar wants of our consumers and to the ruling fashions, gave us the control of our own market. Still the trade was limited, and exhibited nothing like a national importance. Manufacturers were few and scattered, and failed to represent their condition and necessities before the proper committees in Congress and the national Legislature: consequently, the tariff provisions were inadequate to give the encouragement which a new industry required, and which was afforded to other branches of manufacture.

At the commencement of the war, the Government became the largest purchaser of the heavier and staple classes of hosiery goods, such as shirts, drawers, blouses, and stockings. This demand on the part of the Government was so great, that our own workshops were not only put under requisition for additional machinery, but the enterprise and energy of our manufacturers and capitalists became thereby excited to transfer more fully to our shores, and to develop to a still wider extent, a branch of industry which had hitherto subjected us to a heavy tribute to England and Germany. With this view, a large outlay of capital has been incurred in importing from those countries looms, knitting frames, and a variety of auxiliary machines adapted to the manufacture of the finer descriptions of goods, accompanied by skilful operatives to work and to teach others to work them here; whilst the genius and skill of our own machinists have been successfully exerted at the same time to the achievement of new triumphs (as the records of the Patent Office will show), in the various important inventions and improvements recently made in this particular class of machinery.

Of the industrial developments produced during the war, nothing was more striking or interesting than the beneficent effects of this new manufacture. Lucrative employment was given to a large number of hands, mostly American women; thus affording sustenance and comfort to many families whose protectors and supporters were fighting the battles of the Union, and materially contributing to that prosperity at home, which sustained the hearts of the North in the great struggle.

The manufacture of knit goods by machinery is extensively carried on in the States of Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania, and has been recently

introduced into Ohio and Illinois; and, with proper encouragement, will doubtless be extended into the Western States.

There is field enough for the manufacture, if we can supply our own markets. The use of knit goods, particularly of under-clothing, of a firm and substantial quality, requiring the best American wool, is rapidly extending among the laboring classes, women, and children.

The following conjectural estimate of the consumption of knit goods in this country is not regarded as exaggerated by persons familiar with the trade. With a population of thirtyfive millions, we may suppose that there are eight millions who, from poverty, mildness of climate, or other causes, do not wear stockings; leaving twenty-seven millions, who will use at least three pairs per annum, requiring eighty-one million pairs, or six million seven hundred and fifty thousand dozen, the value of which at \$3.00 per dozen, which is considered a fair estimate at present prices, would be \$20,250,-Estimating that there are eighteen million males, onehalf of whom will wear knit shirts and drawers, and allowing one shirt and one pair of drawers to each of the nine million males per annum, one million five hundred thousand dozen will be required, at \$12.00 per dozen, of the value of \$18,-000,000. Estimating that there are seventeen million females, one-quarter of whom will wear under-vests and drawers, and allowing only one garment to each, three hundred and seventy-five thousand dozen, at \$12 per dozen, of a total value of \$4,500,000, will be required, making the whole value of the above staple goods alone, required for American consumption, \$42,750,000.

It is the peculiar characteristic of the manufacture of knit goods by machinery, as compared with most other of our textile manufactures, that, while a vast saving over goods knit by hand is effected by the use of machinery, there still remains a large portion which requires to be finished by hand, and that by the very best class of hand workmen, and particularly workwomen; so that the labor upon this class of goods suffers most severe competition from the cheap hand labor of Europe. While one of the great public advantages of our manufacture is that it gives extensive employment to females in their own homes, affording profitable occupation for time not required for ordinary domestic duties, the necessity for such hand labor is one of the great difficulties with which we have to contend. This feature, as well as the other peculiarities of our manufacture, will be best exhibited by considering in more detail several distinct branches of our industry.

We estimate that there are twenty sets of cards employed for preparing the material for what is known in the trade as all-wool Shaker socks, distributed in small mills having one or two sets each. There are required for each set of cards in the mill ten hands, producing about thirty-five dozen per day for each set. The goods are made by machinery, with the exception of the heels and toes, which require to be supplied by hand. This is all done outside the mill, giving employment to operatives at a distance of twenty miles or more from the mill. A woman can heel and toe four pairs per day, giving her whole time to the Thus there is required the labor of one hundred and five women all the time for each set, or two thousand one hundred to finish all that are produced by the twenty sets. But this work gives partial employment to a much larger number of individuals, as much of the work is done by them while partially employed in household duties. certain districts of Maine, New Hampshire, and Vermont, nearly the whole female population, within a radius of twenty miles from the mill, may be seen at work at their own homes in finishing the goods partially fabricated by

machinery. In these goods, the main fabric is knit by power, while the heels and toes are finished by ordinary hand knitting; this peculiar construction of the fabric being an original American idea.

Another branch of the knit-goods manufacture is that known as hand-seamed hose and hand-seamed shirts and drawers. In this class of goods, the knitting is wholly done by machinery, and the seams are closed solely by hand. Each set of cards in a mill turning out goods of this class will employ about twenty-five hands per set in the mill, producing sixty dozen of hose per day, and will employ eighty hands outside for seaming. The whole number of sets occupied in this branch of manufacture cannot be accurately given, but cannot be less than eighty. Thus, six thousand four hundred hands will be constantly employed outside the mill in this branch of manufacture.

The following is an accurate statement of the operation of a mill of this class in Massachusetts for six months, ending Jan. 1, 1866:—

Cost of hosiery manufactured in six months	32,510
Cost of material on which an excise tax has been paid in-	
dependently of the duties on wool	4,740
Cost of labor	7,520
Number of hands employed in mill, 26.	
Number of seamers constantly employed outside, 85.	

A distinct class of knit goods is known as fancy hosiery. This manufacture is pursued in Massachusetts, Rhode Island, and New York; but most extensively in Philadelphia and vicinity, where it gives employment to many thousand hands.

The articles manufactured comprise, in part, ladies' hoods, shawls, sontags, jackets, victorines, nubas, scarfs, comforters, afghans, leggings, gloves, mits, basques, balmorals, &c.

All of these articles are made of the best of American fleece wool, no other being used, with the exception of some Canada wool for worsted goods. They require the finest and most expensive dyes, which were formerly imported from Europe; some of the aniline dyes costing as high as \$50.00 per pound. Fortunately, they are largely replaced by equally good aniline dyes of American manufacture, an incidental result of the establishment of the hosiery business in this country, for which these dyes are principally used. A manufacturer of fancy hosiery states, that, in using the product of four sets of cards after the yarn is made, his establishment gives employment in knitting, weaving, crocheting, seaming, knotting, rough-mending, finish-mending, sorting, putting up, boxing, and packing, to four hundred and fifty individuals, men, women, and children. The principal part of the labor in the fancy-hosiery manufacture is performed by a class of American women who would shun employment in an ordinary cotton or woollen mill, but find in this healthful, cleanly, and tasteful manufacture an attractive occupation.

The most important part of knit fabrics is that known as machine-made goods, in which the webbing is wholly made by power, and the sewing done by machines. This, however, does not make the finished article; after machine work, hand labor is required, for rough-mending, bleaching, and dyeing, boarding, pressing, finish-mending, making, stamping, tacking, tying, and boxing; all distinct operations, requiring a large number of hands. The number of hands employed in machine work is estimated at ten thousand.

This branch of the knit-goods manufacture has attained its greatest development in the State of New York. It is as characteristic of Cohoes and its neighborhood as the fancy hosiery is of Philadelphia and Germantown, and the peculiar woollen manufactures are of certain old towns in England.

We will barely mention, without dwelling upon them, other branches of the manufacture, such as those of hand-frame and full-fashioned goods, stockinets, rubber-boot linings, nets, &c., and call your attention to a branch of the manufacture of recent development, which is capable, with proper encouragement, of vast extension in this country. We refer to cotton hosiery.

The manufacture of cotton ribbed goods has been carried on in this country some twelve or fifteen years; and, with the exception of some hand-frame stockings, constituted the whole of our cotton hosiery up to the year 1863. The same causes which strengthened the production of other knit goods during the war induced the employment of capital and skill in the production of classes of cotton hosiery never before attempted in this country.

Indeed, essays have been made in the production of all kinds of cotton hosiery, and with the most promising results as to the attainment of the necessary skill and the acquisition of the most efficient machinery, much of which has been Machines are in operation knitting three wholly original. hundred rounds per minute. The machinery had hardly been put in operation, with the investment of capital of at least a million and a quarter of dollars, when, with the close of the war, the flood of foreign importations deluged the country. The agents of foreign manufacturers, to whom we had shown our goods, and who had watched the rising manufacture with alarm, openly declared, for we give their very words, "We are bound to kill you if we can." The system which England has invariably pursued, of attempting to control the manufactures of other countries in their infancy, was put in the most active operation. Foreign goods were poured into the country at prices below the cost of production, and made still lower by fraudulent devices in invoicing. The American manufacturer of these fabrics has been engaged, since the first starting of his mills, in a desperate struggle to keep his own market at the sacrifice of his goods; while at the same time he has had to encounter all the difficulties of acquiring skill and machinery, and educating workmen, bearing at the same time the heavy burden of the internal-revenue tax, and receiving comparatively no relief from the nominal ad valorem duty of merely thirty-five per cent upon foreign goods, no specific duty being provided under existing laws.

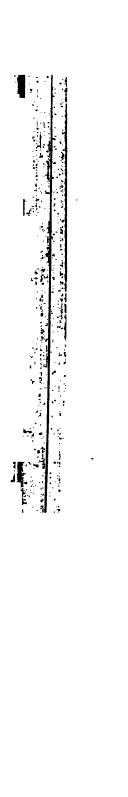
The result of these new enterprises thus far has been, that the manufacture of cotton hosiery has been invariably carried on at *a*-loss; and must inevitably die out, unless relieved by a sufficient specific, in addition to the *ad valorem* duty.

The variety of fabrics in the knit-goods manufacture is so great, and the proportions and kinds of raw material which they contain are so variable, that it would be impossible to present by specific data—as might be done for the mere staple manufactures of cassimeres and flannels, or woven goods generally—the operation of the present tariff laws upon one industry, or the cost of manufacture of hosiery goods in this country, in comparison with imported goods of a similar We must confine ourselves to reiterating the statements concurred in by all of our manufacturers, that, with the increase of prices of labor since the war, and the addition of State and Government taxes rendered necessary by the war, the protection intended for this industry is at present unavailing. No class of manufacturers suffers more than we do from the system of fraudulent invoices: and as these frauds will always exist under the system of ad valorem duties, it is an imperative necessity for the very existence of our industry at home, that the duties should be as far as practicable specific; and that the specific duties should be sufficiently high to fully cover the neutralizing duties on raw material used in our manufacture.

It is believed that no branch of manufacture in this country is more in need of protection to place it on equality with the productions of cheap European labor. Although this perhaps has been sufficiently demonstrated by the facts already presented, it is further illustrated by the statement given in a late address before the Association of Knit-Goods Manufacturers by its president, that "the item of labor is much greater in a hosiery mill than in a flannel mill, while the production of the latter is larger than the former." He says: "In evidence of this fact, I am permitted to state that the actual production of a three-set flannel mill running on fancy shirtings for six months was \$145,034.80, and the cost of labor was \$16,300; while the production of a three-set hosiery mill, running on all-wool socks, hand heeled and toed, was \$87,463, and the labor account \$23,580, for six months."

We are permitted to submit the following statement of the comparative cost of the principal operations in the manufacture of hosiery, prepared by a practical English manufacturer recently established in this country:—

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This statement as to prices of labor on English hosiery is confirmed by testimony furnished by Mr. Simmonds in his history of the progress of the manufacture in England since 1836. He states certain facts elicited with regard to the earnings of stocking-weavers in a trial for libel in the Court of Exchequer in December, 1859. The evidence of the foreman of the plaintiff, a hose-manufacturer, was as follows: "The plaintiff lets out between two hundred and three hundred frames. He charges 1s. per week for the narrow frames, and 2s. per week for the broad frames. largest sum ever paid for a man and his wife tending a frame was from £1 to 22s. per week at the narrow frame. The men are paid from 5s. per week upward to 7s. 6d., 8s., and 9s.: from the gross earnings we deduct for the rent of the frame. If a man earns 10s. per week, he will have to pay from 3d. to 6d. for seaming the stockings, and 1s. for the rent For the defence, Mr. H. James said he should of the frame. prove that the average earnings of the poor men were 3s. 6d. per week. The manufacturers provided their work-people with frames with which to work, at a rent of 1s. per week, and prohibited them from purchasing frames on their own account. A frame cost about £3, and the master charged £2 10s. a year for rent to the workman. Isaac Abbott, who was not in the plaintiff's employ, deposed: The earnings of narrow-frame knitters average between 6s. and 7s. per week, liable to deductions of 1d. per shilling for scouring the stockings, candles, needles, &c., in addition to 1s. per week for the rent of the frames, leaving from 5s. 6d. to 5s. 9d. to live It would require fifteen hours' work a day for five days, and eight hours the sixth day, to earn 12s. per week. From that there would have to be deducted 1s. for the frame, 1s. for scouring: it would cost 4d. or 5d. for candles at this time of the year, and there would be an expense for needles. Other weavers give similar evidence.

Average Wages paid in an American Hosiery Mill for the Five Weeks ending April 14, 1866.

Paid Male Operatives.

EMPLOYMENT.	Time.	Average Time.	Amount.	Average Wages per Day.	Average Wage through the Mi per Day.
Wool-spinning	113	4	\$188.62	\$1.70	
Overseer Wool-carding	80	i	75.00	2.50	1
Wool Picker	29	i	45.92	1.58	
Strippers	88	3	139.50	1.58	1
Others	161	6	132.91	82	
Cotton Spinners	82	1 1	96.00	8.00	
" Carding	319	11	478.84	1.58	i
Others	338	12	265.20	80	1
Overseer Knitting	82	1	105.62	3.25	
Hand Knitters		1			
Rotary Knitters	90	8	207.31	2.80	
Others	814	11	527.13	1.68	1
Overseers Finishing	62	2	195.93	8.00	1
Boarders	600	21	1,027.81	1.71	
Bleachers	278	9	424.24	1.51	
Others	130	4	201.91	1.54	1
Dyer	291	1	118.00	4.00	\$1.60
Others	1				

Paid Female Operatives.

Employment.	Time.	Average Time.	Amount	Average Wages per Week.	Average Wages through the Mil per Week.
Cotton Card	. 434	15	\$388.00	\$3,15	
Wool Card-tenders	. 88	8	67.18	2.67	
Wool Spinners	. 390	14	299.07	2.35	
Cotton Spinners	. 358	12	308.84	2.89	1
Knitters, Circulars		28	963.77	4.83	1
Knitters, Footers		15	455.19	4.00	i
Winders	. 887	30	887.57	8.75	1
Ravellers	. 208	7	215.65	3.93	1
Day Hands	. 387	13	430.74	4.41	i .
Stitchers	. 1,737	58	2,222.16	5.49	1
Hand Sewers	. 280	10	815.38	4.50	
Rough Menders		24	921.45	5.67	1
Finish Menders	. 297	10	404.58	5.85	1
Cutters		9	326.96	5.81	
Welting, day hands		6	141.19	2.79	1
Mating, Stamping, &c	. 230	8	254.60	4.41	1
Crocheting, Linking	. 258	9	827.21	5.25	ì
Folding	. 303	10	368.67	5.07	
Boarding	. 135	5	191.08	6.21	İ
Boarding	.		557.77		\$4.55
Others	.	1 1		i	

How striking the contrast with the wages paid in an American hosiery mill, as exhibited in the foregoing statement, not prepared for the purpose, but taken at random from the actual current reports of the mill!

It becomes now our duty respectfully to suggest such provisions in the contemplated revision of the tariff laws as will place our industry on an equality with other American manufactures; will re-imburse the duties and taxes paid upon materials used in manufacture, and for the internal revenue; and give us some assistance in competing with the low wages and accumulated capital of other countries, and in preserving that liberal compensation for labor demanded by the necessities of American civilization.

In respect to the duties upon foreign knit goods, composed in whole or in part of wool, we commend to your attention, and express our approval of, the provisions contained in the proposed tariff on manufactures, recommended by the Executive Committee of the National Association of Wool Manufacturers, in a statement addressed by them to the United-States Revenue Commission. The provisions in relation to knit goods recommended by that committee were adopted after full consultation with the leading knit-goods manufacturers in the country, and were cordially approved by the latter. The views hereafter expressed in the statement referred to are fully in accordance with our own; and the placing the manufacturer of woollen knit goods upon an equality with other manufacturers would remove much soreness existing in relation to the inequality of present provisions, - an inequality, however, mainly attributable to the want of proper representations by our own interest.

The portion of statement referred to respecting knit goods is as follows:—

"It is believed that the provisions under consideration operate more equitably than those of the present tariff in re-

spect to a most important and rapidly developing industry, that of knit goods. Under the present tariff, the duty on shirts, drawers, and hosiery of wool, or of which wool shall be a component material, not otherwise provided for, is fixed at twenty cents a pound, and, in addition, thirty per cent ad valorem; the specific duty being four cents, and the ad valorem duty being ten per cent less than upon woollen cloths. The wool which enters into a majority of these goods is fine American fleece; and, if wholly composed of wool, they would be clearly entitled to the same duty as woollen cloths. A large class of knit goods, including the fancy hosiery, a rapidly advancing and peculiarly American industry, furnishing goods of great beauty and taste, and consuming the most expensive aniline dyes, is made wholly of American clothing wool. These goods, which would cost more than eighty cents per pound, would bear under the bill proposed a specific duty of fifty-three cents, and the same ad valorem duty as is provided for other goods. other class of knit goods has a portion of cotton, which is introduced to prevent shrinkage. It would be impracticable to separate the goods composed wholly of wool from those partially composed of cotton by placing a less duty on the latter, as all foreign competing goods, whatever their value, would have some cotton placed in them to bring them The distinction is sufficiently prowithin the lower duty. vided for by the minimum scale of duties. It is desirable that the specific duties on the knit goods should be sufficiently ample to secure full compensation, as the waste in hosiery goods, from cutting, trimming, and fitting, is greater than in other woollen fabrics; while there is a large consumption of trimmings, such as bindings, tape, spool-cotton, silk, buttons, linen thread, &c., on which duties are paid. The industry of knit goods is entitled to special consideration, from the national importance which it has already attained. The number of sets of machinery employed upon this class of goods is estimated by a Committee of the National Association of Knit-Goods Manufacturers at four hundred. The number of hands employed — men, women, and children — is estimated at ten thousand. The aggregate amount of wages paid is set down at \$3,000,000 per annum; the amount of wool consumed, at six million five hundred thousand pounds per annum. The production of the four hundred sets is estimated at \$19,200,000 per annum, paying a revenue tax of \$1,152,000."*

With respect to the duties upon foreign knit goods of cotton, we have only to commend to your attention, as fully in accordance with the views of the manufacturers of cotton hosiery, the statements presented and provisions recommended in the report made by the National Association of Knit Goods Manufacturers on the second day of May last, by a Committee consisting of Amos A. Lawrence, Henry V. Ward, George C. Bosson, S. G. Weston, and Thomas Appleton, which is as follows:—

"The Committee appointed by the National Association of Knit Goods Manufacturers respectfully represent, that, after a careful inquiry into the causes which operate to create the present depression and disaster in cotton fabrics of this description, they have become convinced that any reliance for protection on the present tariff of ad valorem duties is misplaced; that the rate of thirty-five per cent ad valorem is nominal; that the real rate is much less.

"We do not know why this important branch of industry, conducing so much to the comfort of the whole body of our

^{*}This estimate was derived from statistics obtained from one locality, and from only one branch of the manufacture. From more recent information, we estimate the whole number employed in all branches at not less than 40,000.

people, should not receive, during its infancy, the same care of the Government which has been extended with such happy results to other departments of labor.

"Already we have made great progress in transferring from Europe the machinery and the skill which has heretofore laid us under heavy tribute. Our production is reckoned by millions, and, coming into competition with the foreign importations, it has caused a heavy reduction in the price of all these articles of domestic use. Meantime, it has added another impulse to the energy and ingenuity of our people, and has opened a new avenue to the employment of capital. But the internal taxes, and the practices of foreign agents, have rendered nugatory the protection which it was designed to grant us, and which is now essential to save us from serious, and with many of us from ruinous loss.

"On an article manufactured here, similar to a foreign fabric, costing at the place of exportation one hundred cents, the excise duty, under the proposed law, would be ten cents; the tax on cotton, ten cents; and the excise and other taxes on the materials used in the manufacture, five cents and upward, making in all twenty-five cents: thus leaving only ten cents instead of thirty-five cents, which it was the desire of Congress to grant.

"This rate of duty is altogether inadequate to afford us encouragement or protection (even if its influence were not destroyed by the undervaluation of foreign goods for customhouse entry), nor will it meet the wants of the Government for revenue.

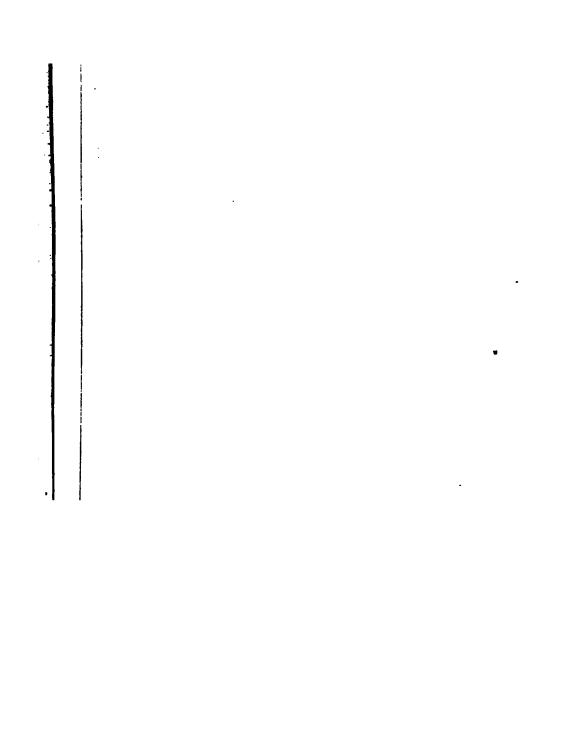
"The Committee therefore recommend the adoption of the following schedule of duties:—

"On hosiery, shirts, and drawers, composed wholly of cotton, valued at a price not exceeding one dollar per dozen, twenty cents per pound; valued at over one dollar, and not exceeding two dollars per dozen, thirty cents per pound; valued at upward of two dollars per dozen, forty cents per pound; and, in addition thereto, thirty-five per cent ad valorem; and on all knit goods made wholly of cotton, not otherwise provided for, thirty cents per pound and thirty-five per cent ad valorem."

Commending the whole subject to your favorable consideration, we have the honor to be, sir,

Very respectfully, your obedient servants,

CHARLES H. ADAMS. GEORGE C. BOSSON. I. R. SCOTT.



Van Batchelour

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BOSTON BOARD OF TRADE.

WOOL REPORT

1867.



BOSTON BOARD OF TRADE.

WOOL REPORT:

PREPARED BY

Mr. George W. Bond and Mr. Matthew Luce.

No Report was made to the Board, for 1866. The mills generally, were in full operation during that year, and the prices of Wool were, on the whole, well maintained throughout, notwithstanding a large importation, stimulated by an effort made by the growers for a heavy increase of duty upon foreign Wools.

Believing that this additional duty was inevitable, the Wool Manufacturers Association united with the National Wool-growers Association to obtain an equivalent addition upon foreign Woolens. The great demand for Woolen goods during the year led to heavy importations from abroad, which were continued under the impression that this tariff would become a law, and with duties so high as to be prohibitory, would secure the importers from loss. The bill was carnestly pressed upon Congress, in the spring of 1866, but failed to become a law. With some modifications it passed the House of Representatives, but was laid over by the Senate to the next session, on the last day of which it passed the Senate.

The great stimulus previously given to the manufacture and importation of Woolen goods created a glut in the market, and notwithstanding the increase of duties, prices rapidly declined, resulting in very heavy losses both to manufacturers and to importers. This led to a lessening of production and a general decrease in prices of Wool, from the commencement to the close of the year.

Soon after the passage of the tariff, in March, 1867, there was a little increased demand, especially for foreign Wools, at a slight advance in prices, but this was of short duration. As a whole, of course with some exceptions, all branches of the Wool and Woolen trade have been unprofitable and unsatisfactory.

Thus far, therefore, we see that the high duties imposed upon Wool have been productive of no advantage to the Wool-grower. This we admit is owing in part to the generally depressed state of trade, and to the economy forced upon the people, by the reaction from the large profits realized during the war, through the effects of an inflated currency; but it is in a great measure caused by the heavy importations before referred to, made in anticipation of the increased duties.

While considering this subject it may not be out of place for us to see what has been the effect of our legislation upon those countries with which we compete.

Mr. Wells, the Special Commissioner of the Revenue, in his very able Report for 1866, p. 55, says,—

"Fifthly. To the extent to which we now deprive the American Wool Manufacturer of advantages in the selection and cost of his raw material, to a certain, if not to an equal extent do we increase those of his foreign competitors.

"The seventy millions of pounds of foreign Wool annually imported into the United States to meet a demand which the production of American Wool does not yet supply, will not cease to be produced because the American manufacturer is forbidden to take it; diverted from its present channel of consumption, it must find its way to the markets of Europe; and through the diminution of price which always follows an excess of supply, an advantage will be given to the foreign, over the American manufacturer largely additional to what he now possesses; and this coupled with the use of shoddy and cotton, will lead to an importation of cheap foreign Woolens into the United States, which no tariff, short of absolute prohibition, can suppress."

And in a note, in the same connection, Mr. Wells further says,-

"This point is further illustrated by reference to the ranges of prices which have prevailed for Mestiza Wools during the last ten years. Previous to 1857, the prices of these Wools ranged from fifteen to eighteen cents, in the markets of production. Under the tariff of 1857, which admitted Wools, costing less than twenty cents per pound, free of duty, the competition of the American manufacturers carried the price up to the highest point at which they could be admitted free. When, however, the free limit was reduced to eighteen cents, the price quickly responded by a similar reduction.

"The stoppage of the American Woolen mills, at the commencement of the war, next reduced the prices, by the cessation of demand, to nearly as low as they were previous to 1857. Under the tariff of 1864, subjecting all Wool, costing from twelve to twenty-four cents per pound, to six cents per pound duty, the price still further declined, until Mestiza Wools, of good quality, have been sold in Buenos Ayres at less than twelve cents per pound. If the duties proposed in House Bill 718, should now become a law, experienced judges are confident that the price of these Wools, in consequence of the entire withdrawal of the American demand, will fall still lower, so that European manufacturers can obtain their supply for a less price even than the duties alone would amount to in the United States."

Has the prediction proved true !

Mr. Helmuth Schwartze, of London, one of the largest and most influential Wool Brokers in the world, in a very full and interesting Report of the Wool market for the past year, says,—

"The tendency has been uninterruptedly downward, owing to the disproportion between supply and consumption, and also owing to the curtailment of English exports to America. The United States tariff almost excludes the import of Wool and Woolen goods, and thereby turns an additional stream of the former upon this market, while at the same time it stops the outflow of the latter. From the Cape, the estimated export of Wools to America, was fifteen thousand bales, or seventy-five per cent. less last year than in 1866, and this quantity had to come to the already overburdened English market. The exports, on the other hand, to the United States, of Woolen manufactures, fell from £5,037,314 to £3,326,631, or about thirty-three per cent."

It is argued by some that the quantity of Wool imported by the United States is so inconsiderable, compared with that consumed in Europe, that it cannot affect prices there; such people forget that it is the last million pounds that make a scarcity or an overstock.

Further to show this, we append a table (marked A.) showing the absolute prices obtained for Unwashed Cape Wools in London, at the Quarterly Auction Sales, from 1851 to date, that being the leading market of the world for this kind of Wool; also of No. 1 Mestiza Wools, in Antwerp, the leading market for this class.

These are the two kinds of fine Wool which have chiefly been imported here, and which have been regarded as most seriously competing with American Merino Wool.

A careful study of the table referred to, will, we think, strike any one as showing a remarkable coincidence between the prices obtained and the influence which Mr. Wells referred to as resulting from high tariffs in this and other large consuming countries.

The same table also shows the quantity of Wool annually exported from Buenos Ayres, Australia and the Cape of Good Hope, which, from about 65,000,000 pounds in 1851-52, has increased to 316,000,000 pounds in 1866-67. The prices obtained however, show, during this long period, very little fluctuation, except that arising from incidental causes, as little, probably, as almost any article of merchandise, which seems to indicate that the demand of the world keeps pace with the supply.

The following is given as the importation, into New York and Boston, of the different classes of Wool, under the present tariff, to the close of the year:

Wool,-Classes 1 and 2,						7,906,174 lbs.
Wool,—Class 3,						17,892,315 lbs.*

by which it will be seen that the importation of Wool of the kind referred to in this table has nearly ceased. This is looked upon by the Wool-growers as a favorable result which will lead to high prices for Wool of home growth. In this they may be disappointed. For already the Wools have fallen abroad to an extent which nearly balances the added duty, consequently they can be imported for about the same prices as before. But these our manufacturers cannot afford to give, to put into goods to compete with those made of the same Wool obtained at the cheap rates now ruling in Europe.

Take, for instance, a yard of Broadcloth weighing one pound, as given in table A of the Statement of the Executive Committee of the National Association of Wool Manufacturers, addressed to the United States Revenue Commission, May, 1866, page 36; we have shown that already, in less than a year from the passage of this tariff, the prediction of Mr. Wells has been fully verified, and that in spite of the enormously high duties a yard of Broadcloth made of these competing Wools can be imported cheaper than under the old tariff, and that consequently we can neither afford to import Wool nor to pay as much for American Wool for this manufacture as we could under the tariff of 1864, high as that was, and not nearly as much as we did under that of 1857, when all these Wools came in free. The figures will be found in table B, appended to this Report.

We do not present these facts with any desire to effect an immediate change in the tariff, but that they may be brought to the attention of the people, particularly of the Wool-growers, who, perhaps, may be induced to watch the course of trade until they shall become convinced that the world is now too intimately bound together to make any violent attempts to disturb the laws of trade successful.

We annex the usual tables of Imports, Stock, etc., (marked C,) to which we beg to call attention.

^{*}The estimated annual consumption of Carpet Wool, from 1852 to 1857, was 15,200,000 lbs.

[†] As the above is about to go to press, we learn that the choiers at Buenos Ayres is so severe as to stop all business and all intercourse with the interior. This will probably greatly delay shipments from that quarter, which may affect the prices of Wool in Europe.

APPENDIX TO THE REPORT ON THE WOOL TRADE.

(A.)

Table showing the relative Supply and Prices of fine Unwashed Foreign Wools in Europe, from 1851 to 1867.

Public Sales of Unwashed Cape Wool	REMARKS.	-Sales of No. 1, Mestiza, in Antwerp.	Bales Wool Exported from Buenos Ayres.	from Australia
in London.		Francs per Kilogramme.	Bales 830 lbs. ea.	Bales 370 lbs. es.
850			17,069	138,62
% August 6 @10 " August 6 @10 " Dec'r 7 @10 855. Feb'v 74@104			27,677	
" May 7 @11 " August 8 @11 " November, 8 @10 " Dec'r 31 7 @10	United States Duty, 30 per cent.		33,273	
856, March 9 @184 " May 10 @125 " July 9 @11 " November, 9 @184 857, March 10 @14	Duties in France reduced 23 per cent. Stock of Wool in this country small and con-		87,835	
" July 9 @14	country small and con- siderable purchases of Unwashed Co'l Wools in London.		84,255	
" November, 6 @12 1858, March 7 @13 " May 7 @12 " July 7 @12 " November 10 @13 859, March 10 @14	in London. Financ'i Crisis in this country & prices for most Wools fell in Europe, from Nov. 1857 to Feb. 1858, 25 per ct.	July, 1.90 @ 2.10 Sept'r, 1.95 @ 2.20 Dec'r, 2.15 @ 2.40 2.20 @ 2.50	49,970	
" May 9 @13 " July10 @13 " November, 9 @13	tinder 20 che	1.95 @ 2.30 Sept'r, 2.15 @ 2.45 Dec'r, 2.35 @ 2.60		240,700
860, March 9 @15 " May 9 @13 " July 9 @13 " November, 9 @13	con 20 64%	2.40 @ 2.60 2.45 @ 2.70 Sept'r, 2.25 @ 2.40	60,892	270,56
861, March 8 @13 " May10 @14 " July 64@12	The Machin'vin this coun- try on Army Goods and no demand for fine Wools or		65,216	298,157
" November, 6]@11 862, March 8 @11 " May 8 @11 " July 8 @11	Woolens.	Oet'r, 2.10@2.25	78,697	310,33
" November, 8 @113 863, March 8 @113 " April		April, 1.80@2.00	1	
" July 8 @11	United States Duty, under Dicents, 5 per cent.—over 18 cents, 3 cents per lb.		1	371,48
" October 9 @12 " Dec'r 9 @12 " 8 @10	18 cents, 3 cents per lb.	Oct'r, 1.95@2.15	1	
January 9 g 13 August 8 g 10 Dec'r 7 (a 10		Jan'y, 1.95 @ 2.15	130,532	432,55
817 @10 ' 1865, January " March 6 @11}		 Jan'y, 1.75@1.95		
" September, " August 7 (a.12	United States Duty, over	Sept'r, 1.80 @ 1.90	141,698	455,914
" Dec'r 8 @12 " " 7 @11 869, March 8	United States Duty, over 12 cents, 6 cents per 1b.— under 12 cents, 3 c.	Dec'r, 1.85@1.95	·	
" November, 81@101 " November, " Dec'r 8k@10		June, 1.65 @ 1.80 1.70 @ 1.95 1.80 @ 1.90	159 057	
" " 8] a 10 " " 7 (a 9 867, March 7] a	.\\	March,1.75@1	96	`.
April	1	•	.\	

(B.)

Extract of Table presented to the United States Revenue Commission, in Statement of the Executive Committee of the National Association of Wool Manufacturers, May, 1866, page 36, showing weight of certain goods,—also, foreign cost and duty under the tariff of 1864.

	Cassimeres.	Doeskins.	Broadcloths
Average weights per yard,	9·33 oz.	8·50 oz.	16 oz.
Average cost per yard, abroad,	93·70 cts 51·47	89·10 cts 48·39	175:00cts 94:00
	145-17	137:49	269.00

Table showing cost of same, if Unwashed Cape and Mestiza Wool falls 1d. or 2c. per pound abroad, assuming, as in the statements above referred to, that it takes 4 pounds of the so-called competing Wools, to make 1 pound of Cloth.

Average cost per yard, abroad, Duty Specific at 45 cents per pound, . Duty Ad Valorem 35 per cent.,			26.24	23.90	167.00cts 45.00 58.45
			146-44	138-45	270.45

Cost if Wool declines 2d. or 4c. per pound.

Average cost per yard, Duty Specific at 45 cents per pound, . Duty Ad Valorem 35 per cent.,			26.24	23.90	159·00 45·00 55·65	-
• .			140-14	132.71	259.65	-

Cost if Wool declines 3d. or 6c. per pound.

Average cost per yard,	:	:	:	:	:	79·70 26·24 27·89	76·35 23·90 26·72	151·00 45·00 52·85
						133-83	126-97	248.85

RESUMÉ.

Foreign cost and	dutics	in 1866,		•		•			145-17	137-49	269.00
Cost and duties,	wool.	" dealinina	{ with d	lutie of 18	67,	nder	•	•	152.73	144·18 138·45	281·00 270·45
" " "	"	,,	2d., .	•			•	•	140-14	132.71	270.45 259.65
		<i>,,</i>	3d., .	•	٠	•	•	•	133.83	126.97	248.85

(C.) COMPARATIVE TABLE OF IMPORTS OF WOOL AT BOSTON.

	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.
par guil	8,126,888	1,162,808	1,971,862	689,688	149,648	2,806,681	2,688,102	1,827,027	790,060	1,380,648	661,818
Ruedos Ayres	110,092,2	1,648,867	8,620,167	2,775,277	8,466,158	4,869,580	6,288,846	9,473,668	908'806'6	12,368,988	6,521,681
- Lorenza	5,241,082	2,011,792	2,861,288	2,718,882	2,004,000	8,116,481	8,666,811	2,810,924	1,269,018	1,881,748	2,180,655
alta Dice.	507,286	22,063	1,066,695	846,886	:	2,287,229	145,766	258,768	:	8,201	162,174
'spe of Good Hope	2,506,716	1,984,872	4,464,590	6,624,979	8,421,620	2,987,814	2,579,006	5,107,281	917,969	2,868,753	918,567
Hawall.	98,496	÷	8,802	i	i	÷	:	:	:	:	:
Serve and Chill.	8,045,440	8,578,446	2,888,641	2,288,192	8,866,111	1,060,065	1,107,114	386,546	1,084,066	1,682,670	2,202,970
Took Indies	281,026	64,213	771,790	241,439	1,788	i	:	61,402	:	98,306	:
grada	74,451	:	878,078	197,898	289'966	180,688	68,112	:	:	:	:
4	866,084	:	68,589	:	811,686	:	284,796	215,678	:	:	:
gow Zonland	:	:	:	:	:	:	:	:	:	438,254	:
guadrios	636,706	88,808	141,941	906,42	571,478	801,445	615,960	896'899	776,888	47,498	080'87
Total	17,941,061	10,550,849	18,177,878	16,208,304	16,878,516	17,580,968	818,178,71	20,780,124	14,502,412	30,027,968	12,675,890
smports into New York	10,188,496	6,967,189	10,607,026	17,078,226	12,461,862	88,864,049	47,571,920	61,661,879	01,691,690 82,651,690	86,066,176	19,868,300

(C.)—Continued. STOCK OF FOREIGN WOOL ON HAND AT BOSTON, JANUARY 1, FOR SEVEN YEARS.

	_	1862.	Ħ	1863.	71	1864.	71	1865.	1	1866.	τ	1867.	1	1868.	In New York.
	Balos.	Pounds.	Balos.	Pounds.	Beles.	Pounds.	Balos.	Pounds.	Bales.	Pounds.	Balos.	Pounds.	Balos	Pounds.	Balos.
Smyrna, Byrlan, Donakol, etc	2	192,000	2,865	000'008	8,588	1,400,000	8,469	1,850,000	2,822	000'088	1,561	000'0#9	4,196	1,900,000	8,700
Buenos Ayres	Ę	000'089	2,000	1,700,000	1,677	1,500,000	1,488	1,800,000 2,881	2,881	2,000,000	2,400	2,000,000	1,082	875,000	6,500
Valparateo	:	:	:	470,000	:	470,000	:	000'099	99	270,000	<u>:</u>	:	1,600	750,000	:
Chilian Merino and Mertins	<u>:</u>	1,000	8	000'08	i	127,000	i	190,000	i	:	:	150,000	:	800,000	÷
Perurian	:	:	\$	8,000	i	:	i	:	:	:	:	:	:	:	:
Best Indian	8	78,000	35	47,000	38	17,000	8	88,000	:	:	\$	000'08	83	900'09	2,800
African	8	000'06	2,864	780,000	8,079	000'098	2,735	000'008	2,400	000'086	1,600	000'000	1,070	430,000	:
Cape of Good Hope	6,128	2,500,000	8,048	2,500,000	1,019	450,000	7,845	8,200,000	187'8	1,200,000	8,884	1,700,000	1,921	860,000	1,200
Spenish	:	:	35	168,000	3	150,000	3	72,000	:	:	:	:	i	:	:
Agetalian	\$	21,000	8	14,000	23	000'8	:	:	:	: 4	28	000'988	:	:	09
Total	7,989	8,518,000	14,834	14,824 6,667,000	10,00	10,004 6,086,000	16,812	7,515,000	10,184	000'088'9	10,818	6,485,000	9,946	6,155,000	18,200
CALIFORNIAL	OF DOMESTIC WOOL, CALIFORNIA WOOL, LIPORNIA AND TEXAS,	Woot, 1864, 1866, 1866, 1866, Woot, 1866, 1866, 1866, 1866, 1866, 1866, 1866,	14	go go	7 000 000 000 000 000 000 000 000 000 0	9000 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Philadelphia do o do	8,000,000 8,000,000 8,000,000 8,000,000		pounds; Nedo. do. do. do.	Ne# ¥00 60 60 60 60 60 60 60 60 60 60 60 60 6	######################################	2 8 8 9 4 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	90000000000000000000000000000000000000	

(C.)—Continued.

PRICES OF BILLINGS' SUPER PULLED,

JANUARY 1, EACH YEAR.

183765	1858
188845	1854
183962}	1855
184045	1856
184145	1857
184240	1858
184828	1859
184440	1860
184540	1961
184684	1862
184780	186870
184886	186487
184980	1865
185040	1866
185145	1867
1852	1868

Boston, March, 1868.





Sam Bothelow

- AN ADDRESS

DESIGNATION OF STREET

NATIONAL ASSOCIATION OF KNIT GOODS MANUFACTURERS,

47 996

SECOND ANNUAL SEETING IN NEW-YORK CITY.

May 7, 1867,

By JOHN L. HAYES.

BOSTON: THESE OF JOHN WILSON AND SON-1867.



PROTECTION A BOON TO CONSUMERS:

AN ADDRESS

DELIVERED BEFORE THE

NATIONAL ASSOCIATION OF KNIT GOODS MANUFACTURERS,

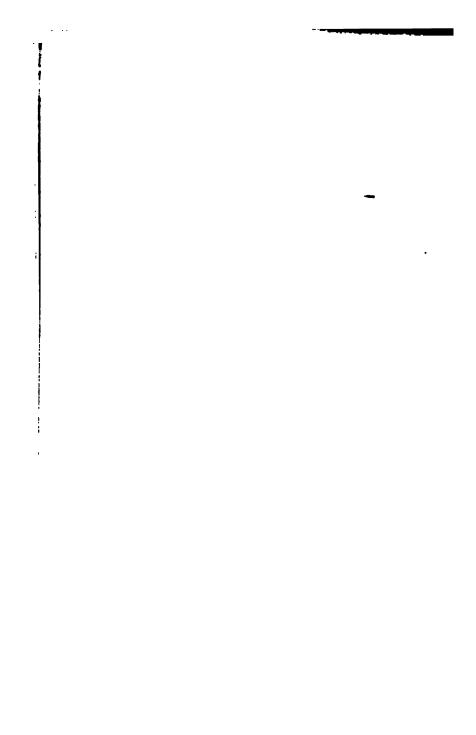
AT THE

SECOND ANNUAL MEETING IN NEW-YORK CITY,

MAY 1, 1867.

By JOHN L. HAYES.

BOSTON:
PRESS OF JOHN WILSON AND SON.
1867.



ADDRESS.

GENTLEMEN OF THE "NATIONAL ASSOCIATION OF KNIT-GOODS MANUFACTURES:"

THE occupation of my time during the brief period of my connection with your Association, in attention to important general interests affecting your welfare, has prevented me from obtaining that minute statistical information which would justify me in attempting, as I would have preferred, the discussion of questions specially relating to your interests; while, at the same time, my recent occupation has convinced me of the necessity of continually re-enforcing our own minds, by seeking fresh, or recalling dimly remembered, illustrations of the great principles upon which the prosperity of American industry is based. With the absorption of the public mind in questions affecting the national existence; with the pervading influence of the literature of England, tinged as it is by its own political philosophy; with the increased favor accorded to such expounders of that philosophy as Bright and Mill, on account of their sympathy with the cause of American freedom; with the power of a great municipal press, with a single brilliant exception in one of its representatives, allied to the interests of a foreign commercial policy; with a new generatic: of men uninstructed in those doctrines which their fathers

accepted as axioms, - there is urgent need even at the East, enriched as it has been by diversified industry, of reviving the faith in the principles of political economy, which, twenty years ago, were accepted as firmly as religious truth. I have, therefore, no hesitation in inviting your attention to one of the many considerations by which the American system of political economy is commended to public favor. I propose to maintain the proposition, that protection of domestic industries is a boon to American consumers. Waiving all attempts to fortify my position by deductions from assumed general principles, the favorite method of free-trade economists, I propose to consider this proposition inductively; and to show, not from what Lord Bacon calls "mere rumors or whispers of experience," but from well-established facts and phenomena exhibited in the progress of various industries, that the benefits accruing to consumers from their establishment through protection, whether by tariffs or patents, have counterbalanced the temporary inconveniences experienced from duties or restrictions. Many may admit the soundness of this proposition, and yet, by the variety of illustration, may gain in the impression of its truth. For this reason, Dr. Paley defends the use of varied illustrations of natural theology. As he says, "It is by a frequent or continued meditation upon a subject, by placing a subject in different points of view, by induction of particulars, by variety of examples, by applying principles to the solution of phenomena, by dwelling upon proofs and consequences, that mental exercise is drawn into any particular channel." * To a large class, something more than impression of the truth of this proposition is necessary, — namely, conviction: and while it is a party cry that protection by tariffs is a tax at the expense of the many for the benefit of a few; and when persons speaking with authority on questions of revenue could be

^{*} Paley's Natural Theology. School Library edition. Vol. ii. p. 206.

found to argue, that the recently proposed tariff on wool and woollens, if it should have the effect sought by those who proposed it, would tax the community to the extent of over seventy millions per annum, for the protection of an interest the whole value of whose product cannot be considered in excess of thirty-six millions,—it cannot be unnecessary to multiply examples of the fallacies of such reasoning.

I shall draw my illustrations irrespectively from the effects of protective duties and of patents. And here I would observe, that the strongest advocates of free trade have admitted the fallacy of what has been called their most comprehensive and most noted maxim, - the laissez-faire, or let-alone principle, - the doctrine of non-interference by government with the economical interests of society, by recognizing the reasonableness of granting patents and copyrights. "The condemnation of monopolies," says Mr. J. S. Mill, the ablest of the British economists, "ought not to extend to patents by which the originator of an improved process is permitted to enjoy, for a limited period, the exclusive privilege of using his own improvement. This is not making the commodity dear for his benefit, but merely postponing a part of the increased cheapness which the public owe to the inventor, in order to compensate and reward him for the service." * How marvellous has been the admitted effect of the patent-protective policy upon the wealth and comfort of the people of Great Britain! Mr. Woodcroft, the Superintendent of the British Patent Office, attributes the growth of the cotton manufacture in Great Britain from 1766, when the entire value of cotton goods manufactured was £200,000 a year, to 1862, when 451,000

[•] It appears from the report of the testimony taken by a Select Committee of the House of Lords, in 1852, appointed to consider a bill proposing to amend the then existing law of patents, that many Englishmen, — among them the celebrated engineer, Mr. Brunel, and Mr. J. L. Ricardo, a Member of the House of Commons, — are so consistent in their free-trade doctrines as to recommend the total abolition of patent laws.

workpeople were employed in 2,887 factories, containing over thirty million spindles, to ten inventions, - those of Kay, Paul, Arkwright, Hargreaves, Radcliffe, Cartwright, Jacquard, Roberts, and Heilman.* It has been said, " Every one of these ten inventions which have produced these marvellous results was protected by patents. Each inventor was stimulated by the reward which this protection opened to his hope, if not his fruition, and, without the prospect of appropriating to himself wealth and power, would have shrunk from the labors of creating and introducing his invention. Granting, as is quite probable, that the individual importance of these men, in relation to the cotton manufacture, is somewhat exaggerated; and that the credit given to them should be shared with the eight hundred men who have taken out patents for improvements in this manufacture, - it is no less true, that the whole system of the manufacture of cotton in Great Britain is founded upon patents." And, it may be added, it thus presents the most marvellous example of the beneficent effects of a protective policy, - an exception which utterly confounds the doctrine of non-interference by government with the economical interests of society. In no other country have the economical interests of society been so dependent upon the governmental protection of patents as in our own. The cheapness of securing patent privileges here, our admirable system of examination, and the fidelity of official administration, have rendered our patont system a complete security and reward for the inventive genius of our people. We have thus one great conservative system of protection, in which there has been no instability. For over thirty years it has remained the same in all its essential features, amidst the fluctuations which have disturbed other portions of our industrial system. The inventions which

^{*} Brief Biographies of Inventors of Machines for the Manufacture of the Textile Fabrics. By Bennett Woodcroft, F.R.S. Page 9.

it has stimulated have cheered our homes, given efficiency to our workshops, doubled our mechanical power by the substitution of machinery, cheapened all our agricultural products, and have given a national character to our arts. We may safely point to the Patent Office as the one institution which, above all others, exemplifies the beneficent influence of the Federal Government upon the wealth and comfort of our people.

Upon the threshold of our inquiry as to the beneficent effects upon consumers of protection by tariffs, we are met by the objection, that the very demand for a duty implies an increase of the price of the imported commodity, and that the protective duty raises the price, not only of the goods imported paying the duty, but of the domestic article competing with it. Indeed, the popular argument of the opponents of our policy is, that the prices to consumers are increased by the whole amount of the duty imported. No such effect has ever been on sought by the advocates of protection, nor has it ever been attained. The rates of duties are fixed, not to guard against the average prices, but the lowest prices, of foreign commodities. The practical benefits of protective duties are found, not so much in relieving from regular importations made by our own merchants, with a full knowledge of the wants of the country, but to secure our ports of entry from being flooded with surpluses forced upon us by foreigners to relieve their own markets, and sustain their home prices, or to overwhelm our industry at any temporary sacrifice, that they may command our markets. Of the great bulk of the products of our manufactures and arts, it is undoubtedly true, as I hope to show by examples, that - while they need to be defended by duties against injurious fluctuations of price, so characteristic of foreign trade, and against the surplus productions of foreign nations, which, thrown upon a well-stocked home market, would lower, to the price of the imported commodity, our

whole domestic product, though tenfold in amount — they are dependent for prices upon domestic competition, and are therefore in the main unaffected by duties.

Protection is a boon to the consumer; because, by relieving domestic industry from foreign fluctuations and excesses, it preserves the industry which is the chief source of supply for the necessities and comforts of our people. One of our most revered living teachers,* under the quaint name of Jonathan B. Wise (Jonathan, be wise), some twenty years ago illustrated, in a simple pamphlet, which should be written in letters of gold, "our actual dependence upon home production, and the consequent wisdom of defending our own industry from every danger." He demonstrated that any people who would be well clad, well fed, and well supplied with the comforts of civilized life, must produce themselves nine-tenths of their consumption, — that being the amount of our own production, — and that it is only upon this condition that they can pay for liberal supplies. He showed that the foreign trade of the whole commercial world is but ten per cent of the value of its industry, and that the greatest commercial nations derive but a very small part of their supplies from foreign commerce. He demonstrated that the attempt to substitute any considerable portion of the product of our domestic industry, by importing the cheaper foreign articles, would inevitably cause such goods to advance so as to cost more than the prices of the home market, and that we cannot pay for more than one-tenth of our consumption, by increasing our exports; because no foreign market will bear any considerable addition to our products without a heavy fall in prices: as in 1847, when our export of breadstuffs, in the face of one of the severest famines on record, broke down the British market, and ruined scores of merchants abroad and at home. These considerations alone establish the paramount importance of sustaining our domestic industry, and render it

^{*} Stephen Colwell, of Philadelphia.

necessary for me simply to exemplify the benefits which this industry has derived from the protective policy.

I seek the first illustration of my subject from your peculiar manufacture. Although single knitting frames have been operated by isolated workmen, particularly at Germantown and Philadelphia, the hosiery business did not exist in this country, as a branch of manufacture, properly so called, before 1832. The germs of the manufacture were sown in two localities, from which have sprung the two characteristic manufactures of New York and New England. The knitting frame, the same machine substantially as the original invention of William Lee in 1585, was first adapted to power by Timothy Bailey, at Albany, in 1831, at the suggestion of Mr. Egbert Egberts, the son of an officer of the army of the Revolution, and first operated by power in Cohoes, in 1832. The credit of the introduction of the power knitting frame clearly belongs to Mr. Egberts, as Bailey was employed and paid by him for the special purpose of adapting the frame to power, after two other workmen had failed. Mr. Egberts had great difficulty in introducing his fabrics; and it is said, in the early days of the manufacture, vainly wandered through the streets of New York, urging merchants to permit him to leave samples of his goods for sale. From his enterprise has sprung the important and distinctly marked knit-goods manufacture of New York, which is now represented so ably by a nephew of the original manufacturer. The business was not firmly established until after the Tariff of 1842, when, through its influence, the originator of this manufacture was happily rewarded for his enterprise.

The commencement of the manufacture of knit goods in New England was at Portsmouth, in New Hampshire, in 1834. It is hardly necessary to say, that the enterprises, both in New York and New England, were undertaken under the assurance of profits given by the highly protective tariffs of 1828 and 1832. The first stocking made in Portsmouth was woven, in 1834, by Daniel Pepper, the father of one of the most important American inventors in this branch of manufacture. tory operations at Portsmouth were confined to spinning the yarn, which was woven in the mill upon knitting frames, operated by the workmen, without power. The work was continued upon knitting frames, operated by hand, until 1844, although an important step was taken in concentrating the workmen in the factory. Up to this time, in Great Britain, all the machine hosiery was made upon single knitting frames, there being at that time, viz., 1844, 48,482 stocking frames in the three kingdoms, employing about 100,000 persons, — one at each, and another winding, seaming, &c., and the rest taking in work.* Slight as was the apparent progress in rivalling the vast English trade, important improvements were yearly made in the manufacture at Portsmouth; such as adapting the frames for working ribbed goods, and in applying power with success. of frames, consisting of the inside work, were imported from England; certain parts were dispensed with; and simpler and more efficient machines were constructed, adapted to power. Some of these are still in operation. Such skill was attained in making goods, especially women's ribbed hose, that the name of "Portsmouth hose" is still given to that style of goods, without regard to the locality where they are made. Previous to 1850, there were only three sets of machinery in operation upon these goods; and a product of 3,000 dozen per year was considered so enormous, that the managers of the mill doubted if a demand could be sustained for this trifling supply. making the ribbed hose, one machine made the leg and another The price paid for knitting the legs was \$1.20 per dozen, and for knitting the foot 75 cents per dozen. The cost at the present time is two cents a piece for knitting the legs, and

Reports of Juries. International Exhibition, 1862. Section C, Hosiery, &c. By
 William Felkin.

five cents for the feet. Where three thousand dozen of these goods were made, there are five hundred thousand dozen made to-day. For knitting ribbed shirts, the prices paid in the early stage of the manufacture were \$4.00 per dozen for the bodies, and \$1.25 for the sleeves. The price now paid for knitting a single shirt body and sleeves is 12 cents. This great reduction of the cost of manufacture was the result, both of the firm establishment of our industry by tariff protection, and of its development through patent privileges. It has been mainly effected through the adoption of the circular knitting machine, invented by Mr. John Pepper in 1851, and by the subsequent introduction of the circular machine for the same purpose, invented by the Messrs. Aiken, father and son. One of these machines run by power, containing 92 horizontal needles, may make from 100 to 200 revolutions per minute, producing the same number of stitches per minute, thus amounting to from 9,200 to 18,400 per minute. These two machines have made the ribbed work, so well fitted by its elasticity to supply the defect of narrowing, in circular knitting, a marked feature of American, and especially of New England, hosiery, and have enabled us to supply our own market wholly with these admirable goods, none being imported. One curious development of the American idea of the ribbed hosiery, and of the inventions which have made it cheap and practical, is the Shaker stocking. This article, consisting of a ribbed, machine-knit leg and foot, with a hand-knit heel and toe, derives its name from the circumstance, that the Society of Shakers at Enfield, in New Hampshire, having purchased some circular knitting machines, first combined the hand-knit heel and toe with the machineknit leg and foot. The durability given to the stocking by making the parts where there is the greatest wear of a texture which can be perfectly shaped by hand, while hard yarn unfitted for machine work can be used, has brought this stocking into great demand. More than twenty sets of cards are employed

in preparing materials for these goods. Pieces of cylindrical ribbed hosiery, knit in the mill by power, for the legs and feet, are sent to the women at their homes in the rural districts of New Hampshire, Maine, and Vermont, to be supplied with the heels and toes, constituting not an eighth part of the finished article. In certain districts, the whole female population is employed, at spare moments, in this work. It may be safely asserted, that there is more hand knitting done in New Hampshire at the present time than sixty years ago, when all the stockings worn were knit at home. What a commentary is this singular fact upon the short-sighted wisdom of Queen Elizabeth, who, when William Lee, the founder, by his great invention, of the knitting manufacture, applied, through Lord Herndon, for a patent for his knitting frame, replied in these words: "My Lord, I have too much love for my poor people who obtain their bread by the employment of knitting, to give my money to forward an invention which will tend to their ruin and make them beggars. Had Mr. Lee made a machine that would have made silk stockings, I should, I think, have been somewhat justified in granting him a patent which would have affected only a small portion of my subjects; but to enjoy the exclusive privilege of making stockings for the whole of my subjects, is too important a grant to any individual." * The American invention may revive hand-knitting among Queen Victoria's "poor people;" for a factory has been recently started near Dublin, Ireland, expressly for the manufacture of Shaker stockings for the London market, by American machinery, which has been exported from this country.

During the period preceding 1860, although the manufacture was still inconsiderable, the knitting industry had attained skill and machinery for an unexpected demand which was made upon its resources. At the opening of the war, the

[.] William Felkin, supra cit.

Government found this industry fully prepared to furnish the class of clothing the most indispensable for the health and comfort of our soldiers. No greater boon could have been given to the most important of our consumers, the national defenders, than the woollen underclothing which this protected industry furnished, and which could have been supplied from no foreign source. The Government became the largest purchaser of the heavier and staple classes of hosiery goods, such as woollen shirts, drawers, blouses, and stockings. Not the least among the circumstances which made the hygienic condition of our armies so excellent, and has induced a change of habit in the whole country, was the general substitution of wool for cotton underclothing, effected by this and the other branches of the woollen industry; so that, while no army was ever better clothed than ours, its commander-in-chief might have said, with respect to cotton and linen, of our million Union soldiers, in the words of Falstaff, "There's but a shirt and a half in all my company." The demand was so great through this source. and the complete protection afforded by the high prices of gold and exchange, that the production of the finer classes of hosiery were undertaken which had never before been attempted. Looms and machinery adapted for these goods, with skilled operatives, were brought from abroad, and the knitting manufacture expanded to national importance.

There is no more striking instance of the rapid development of a manufacture, than the successful establishment of the manufacture of cotton hosiery, which was called into existence by the protective influences of the period of the war. Although this branch of the hosiery business has not, thus far, been a pecuniary success, the difficulties of production which usually attend infant industries have been completely overcome. A merchant and manufacturer, whose name is among the most honored of the patrons and pioneers of American industry, says, that, before the war, the manufacture of cotton

hosiery was considered as one of the impossible things.* In 1860, with prices of cotton then prevailing, ordinary cotton stockings were sold for not less than \$3.00 per dozen. They rose during the war to \$5.00 per dozen; parties who undertook the manufacture estimated that this class of stockings could be made for \$3.00 per dozen. I am informed that parties would now undertake the manufacture at \$1.60 per dozen, and that the productive power of present machinery is not less than 3,000 dozen per day. It is said, that, with cotton at 14 cents, a substantial domestic article for general consumption, equal to that which before the war cost 25 cents, could be furnished to the consumer for $12\frac{1}{2}$ cents. This is a reduction of one-half the cost to the consumer, achieved in less than five years, by efficient protection given during the war.†

If we regard the economy and comfort, to American consumers, as affected by the present position of the knit-goods industry, we find it supplying the great mass of the people with all that they require of underclothing, of a firm and substantial quality, made of the best American wool, and of styles adapted expressly to the wants of consumers. Twenty years ago, the only article of woollen underclothing worn by the laboring classes was an occasional Guernsey shirt, of a coarseness reminding one of the goat's-hair garments which Virgil speaks of as worn by the miserable sailors, - miseris velamina nautis.‡ Through our manufacture, the use of soft and strong wool under-garments has become extended among most of our laboring men, and even women and children. No sumptuary law could have conduced so much to the health of the community as this influence of our single industry. This manufac-

^{*} Mr. A. A. Lawrence.

[†] Since the close of the war, the protection afforded to cotton hosiery by the st valorem duty is insufficient. Nothing more, however, is asked than an additional specific duty of twenty cents per pound, which was recommended by the Committee of Ways and Means, and by the special Commissioner of the Revenue, at the last section of Congress.

[†] Georgics, Lib. III. line 313.

ture — although, like all other industries, it will for a long time to come require to be guarded against foreign fluctuations and surpluses—may be said to be fully established; and this has been accomplished in thirty years. It is demonstrated, that all the goods made by power abroad, can be made equally well here. Estimates, the correctness of which have never been denied, state the value of consumption required of limited classes of knit goods at over \$40,000,000.* It can hardly be doubted, that, within a few years, there will be a demand in this country for \$60,000,000 in value, of all varieties of this manufacture. With this growing demand, there is no reason why the knit-goods industry in this country should not soon compete in importance with that of Great Britain, which employed in 1862, directly and indirectly, 120,000 persons, producing goods valued at £6,480,000. Great Britain has the start of us only in the skilled, but miserably paid, labor of the hand-knitting frame; and it is admitted there, that the old frames must soon be banished by the circulars and rotaries and analogous machines moved by power: for already twenty-five per cent of the hand frames have been thrown out of use. Power machinery was not introduced in England before 1851, the date of its most effective application here. With the command of our own market, we shall have equal advantages, except in the price of labor, which must be overcome by superior inventive activity, to be called into play by the encouragement it meets here. time cannot be distant, when American consumers of the products of this manufacture will have the same benefits from protection as they now have in the fully matured manufactures of hardware, and coarse cottons.

Although the success of the manufacture last mentioned—that of coarse cottons—has often been referred to in illustration of the general position which I maintain, a few definite

Letter exhibiting the condition and necessities of the knit goods manufacture,
 addressed to Hon. Justin S. Morrill, p. 6.

examples of the effect of this industry, as benefiting consumers, less familiar perhaps than the general statements commonly adduced, may be instructive.

The first important impulse to the manufacture of cotton in New England was given by the embarrassments of foreign commerce and the restrictions upon the importations of goods, which prevailed about 1807 and 1808. In 1812 there were in Rhode Island and Massachusetts about seventy cotton mills, with 48,000 spindles. The protective influences of the war, which had raised the prices of the poor articles of cotton previously imported from England from seventeen or twenty cents to seventy-five cents, so stimulated the manufacture, that, in 1815, the cotton mills in New England had reached the number of 165, with 119,000 spindles. It was during this period that Mr. Francis C. Lowell introduced the power loom at Waltham, and for the first time arranged all the processes for the conversion of cotton into cloth within the same building. At the close of the war, the rush of importations was so excessive, that it was apparent that the American manufacturer must sink before foreign competition. The war had nourished patriotic sentiment; and manufacturers were regarded with favor for the aid which they had afforded during the period when foreign supplies were cut off. The Tariff Act of 1816 was therefore passed, which imposed a duty of twenty-five per cent on all cotton fabrics; requiring also, at the suggestion of Mr. Lowell, that they should be taken at a minimum valuation of twentyfive cents a square yard, being in effect a specific duty of of cents.* By the Acts of 1824 and 1828, this minimum valuation was advanced, first to thirty, and then to thirty-five cents

^{* &}quot;In 1816, a new tariff was to be made.... Mr. Lowell was in Washington a considerable time during the session of Congress,... and he finally brought Mr. Lowest and Mr. Calhoun to support the minimum of 6½ cents per square yard, which was arrived." — Introduction of the Power Leon, by Nathan Appleton, p. 13.

[&]quot;In 1818, Mr. Calhoun visited the establishment at Waltham, with the apparent silisfaction of having himself contributed to its success. It is lamentable to think, that in

the square yard, and so continued with little modification until 1834. The effect of this protection in the reduction of the cost of goods, is shown in the prices of this article first made at Waltham, which was precisely that of which a large portion of the manufacture of the country has continued to consist, namely, a heavy sheeting made from good cotton and without starch or dressing, the idea having been to imitate the yard wide goods of India. The changes in the price of this article, produced by improvements in machinery and processes, are stated by Mr. Appleton as follows:—

1816				•	•	•	•		3 0	cents	per	yard.
1819	•		•						21	"	"	"
1826		•		•				•	13) 9	"	"
1829									81	,,,	"	"
1843												

The success of the Waltham company suggested that the manufacture and printing of calicoes might be profitably introduced in this country. With this view the articles of association of the Merrimack Manufacturing Company were drawn up in December, 1821. The bringing of the business of printing to any degree of perfection, proved a work of difficulty and time. Many of the auxiliary arts, such as that of engraving the printing cylinders being then kept profoundly secret in England, while all exportation of machinery from that country was prohibited. Even under the stimulus afforded by the protective duties, the manufacture of prints was hardly successful before 1825. The highest success was finally attained, with gradually reduced prices to consumers for many succeeding years, the prices having been diminished, according to Mr. Appleton, as follows:—

^{1882,} under the alluring vision of a separate Southern Confederacy, he should have become the active enemy of the manufacture which was doing so much for the interest of the planters, and that the influence of his name has continued to keep them in that error."—Introduction of the Power Loom, p. 82.

The	average	price	per yard	in				1825	was	23.07
,,	"	- ,,	,,	,,				1830	77	16.36
"	"	,,	**							
22	"	"						1840		
"	"	"						1845		
,,	"	"						1850		9.24
	**		••							9.15

It was during the protective period, extending from 1824 to 1834, that the most material changes in the texture of American cotton fabrics were made, - changes so marked as to have become of national importance. The Hamilton brown drillings, of a twilled texture, were first made at Lowell in 1827. Before this fabric and that of jeans was first made here by power, no cotton cloths, except of a perfectly plain texture, were made by power in England, although similar fabrics had been made upon hand looms. When the drillings were first introduced at the New-England auction sales, the question was generally asked, "What can be done with them?" According to memoranda which I have examined, made by Mr. Samuel Batchelder, the oldest and most eminent of surviving New-England manufacturers,* the brown drillings were sold by package, in 1828, for 151 cents a yard. This fabric being stronger, thicker, more serviceable, and at the same time cheaper, than any thing which could be imported, supplied a universal want of consumers of cotton. The popular demand set other mills at work. Not less than fifty of the largest mills are now employed upon this fabric, which has become one of the great staples of the American manufacture. The drillings have not varied a thread since they were first

^{• &}quot;This company (the Hamilton Manufacturing Company) secured the services of of Mr. Sannucl Batchelder, of New Ipswich, who had shown much skill in manufacturing industry. Under his management the power loom was applied to the wearing of twilled and fancy goods with great success. The article of cotton drills, since become so important a commodity in our foreign trade, was first made in this establishment" — Introduction of the Power Leom, by Nathan Appleton, p. 29.

See Letter of Mr. Batchelder, p. 51.

manufactured. They have the same width, the same number of threads to the warp, the same for the filling, yarn of the same number, and the same average weight, -2.75 yards to the pound. They therefore furnish a precise standard for comparison of cost of production at different periods. Through multiplication of establishments, and consequent improvements in machinery and processes, the cost has been greatly reduced. This article sold, when first introduced, at 15½ cents, with cotton at about 12 cents per pound. In 1860, according to Mr. Wells's Report, the prices of drillings in gold were 71 to 9 cents. This article has been sold for exportation, within a few months, with gold at 1.30 and cotton about 30 cents, for 20 cents a yard. Here is a case where a domestic protected industry has not only given the consumer a new article of prime necessity, but has reduced its cost to the lowest point at which it can be obtained from any source. The article called "jeans," a lighter twilled fabric than the drillings, though of similar texture, was made here before the latter. When it was first introduced by our own mills, no article like it could be purchased in the stores for less than 30 to 35 cents. A better article from our own than any which could be imported was sold when first put upon the market for 23 cents. The prices of this article in 1860 were 61 to 9 cents. Previously to 1828, the British shirtings had a weight of only five or six yards to the pound, — of course, a thin and unserviceable fabric. Upon the starting of the Appleton Mills in 1828, Mr. Patrick Jackson suggested the making of an article of more substantial fabric, and better suited for the necessities of the masses. Shirtings were therefore made, of a weight of about 2.80 yards to the pound. This article, so well adapted to the wants of consumers, and which had never been imported, became another great staple of the American manufacture. About this time Mr. Batchelder conceived the idea of making a striped blue-white shirting, of stout and substantial twilled texture, expressly

adapted for American whalers and sailors, and which should take the place of the inferior checked shirt then universally worn by seafaring men. The striped shirtings were eagerly bought. They were carried by sailors and whalers to every port in the Pacific and South America, and thus became in demand for exportation. The manufacture of the heavy cottons, which make up a very large proportion of the consumption in this country, had become established beyond competition at home. and thus could be exported with profit. Of these heavy goods there were exported in 1850, 15,000,000 yards; in 1852, 25,000,000; and in 1860, 33,000,000 yards. Thus, so far as the manufacture of cotton is concerned, the introduction of the business in this country has resulted in supplying not only for the population of this country, but also for many other parts of the world, a better and cheaper article for clothing, than could before be procured, either from the looms of India or Great Britain.

It is readily admitted, that fine articles, or those which require experience and skill, and in the production of which machinery cannot be substituted for hand labor, can be produced cheaper abroad than in this country. This is of less moment to general consumers, as such articles are matters of luxury, rather than of necessity. But the effect of the introduction of such finer cotton fabrics as we have attempted, has been invariably the reduction of the price of the imported article. Such was the effect of the introduction of Mr. Bigelow's remarkable machinery, which led to the manufacture of the figured cotton counterpanes known as Lancaster quilts; the foreign article being lowered in price one-half by the domestic production, which has driven the foreign article from our markets. Such was the effect of the introduction of the manufacture of fine lawns, first established in Portsmouth under the stimulus of the Tariff of 1842. lawns, of a fineness of No. 1400, and particularly adapted to

the Southern market, were first put on sale in the spring of 1847. Similar goods, imported from England in 1846, were sold at from 28 to 30 cents. Both foreign and American were sold in the spring of 1847 at from 12 to 15 cents. The lawns continued to be offered at half the cost of the imported article, until the foreign article of the same denomination was driven from the market, and the American lawns were sold as low as 9 cents per yard.

Our attainments in this manufacture show how confidently the country may rely upon a well-protected industry to supply all the essential wants of its consumers. The number of spindles in New England in 1850 has been estimated, upon reliable authority, at 2,751,078; according to the census, the population of New England in 1850 was 2,728,106: making an average of 1,008 spindles to every thousand of its inhabitants. The population of Great Britain in 1850 was 20,793,552, and the number of spindles was 20,857,062: equal to 1,008 spindles to a thousand inhabitants. Thus, in less than fifty years, the productive power of the people of New England in this manufacture had become fully equal to that of the greatest manufacturing nation on earth. The number of spindles in the whole country in 1860 was 5,035,798. Great Britain in 1862 the number was 30,387,457.* whole product, therefore, was at least one-sixth of the British product. To form some idea of the value of this domestic industry to consumers, we might, were not such suppositions always preposterous, conceive this domestic industry to be entirely annihilated. To call upon Great Britain for one-sixth of her product, would make cotton cloth as dear as silk. experience shows, that deficiency of domestic production limits the use. As we could import but one-sixth of our consump-

Introduction and Early Process of the Cotton Manufacture in the United States, by Samuel Batchelder, p. 76.

tion, cotton cloth would cease to be consumed. It is true, a substitute would be found in some other fabric; but, like the substitution of a crutch for a limb, it would always remind us of the extent of our loss.

Allied to the manufacture of cotton is that of the mixed fabrics of wool and cotton, which have grown up during the present century. I refer to those fabrics with a warp of cotton and a filling of wool or worsted, which first appeared in France in 1833 and in England in 1834, and which are classed under the generic name of "mousselines delaine." This fabric, as I have elsewhere said, "whose products are counted by millions of pieces, has proved an inestimable blessing. It enables the most humble female to clothe herself more comfortably and becomingly, and as cheaply, with wool, as she could thirty years ago with cotton." * This fabric, being actually stronger than if made wholly of wool, is practically the same as a woollen texture; the warp being so fully covered, that the presence of cotton can be seen only on the closest inspection. These fabrics are never washed. They may be worn in travelling, or in ordinary housework, without being changed. They are not tumbled, and are free from danger from fire. No fabric could be better fitted for the ordinary wear of females and children. Everywhere in this country, north of Tennessee, they have taken the place of the printed muslins or lawns, which have greatly gone out of use. consequence of the establishment of the domestic manufacture of this fabric, the importation of printed delaines has almost wholly ceased. The American fabrics are made expressly to suit our consumers. In printing them, all the French novelties of style are introduced. The American article is softer, owing mainly to the qualities of domestic wool, and takes better color than the imported fabrics; while the latter is

^{*} The Fleece and the Loom, p. 34.

wiry, and less pliable. The only competing fabric is one imported from Germany, woven from colored yarns, of a lighter texture, and inferior in wear. So great is the perfection to which the art of printing has attained here, that the woven cannot be distinguished by inspection from the printed goods A celebrated importer in New York, who, when called as a witness at a recent trial, had asserted his infallibility in detecting the differences in fabrics, was dismayed at discovering that he had sworn to the identity of the foreign woven and printed American goods. Fortunately his mistake had the happy effect of preventing a contemplated fraud upon the revenue and the domestic manufacturer. We manufacture at present not less than sixty million yards a year of these goods, which are all consumed here, - nearly two yards to each individual of our population. Through the large scale upon which manufacturing establishments are organized, to the extent even of employing in one mill nearly four thousand operatives, the producers have been able to obtain perfection and cheapness, by very small profits upon large quantities of goods, never seeking for more than one or two cents a yard. By the establishment of this domestic industry, the prices have been lowered to consumers — as I learn from disinterested parties, from 30 or 40 cents, the price of the English article when first introduced—not less than ten cents per yard, while a better article is supplied; the prices now ruling at about 20 cents. Here is a direct gain of at least six million dollars annually to consumers, from protection afforded to a single fabric. The prices at which these goods are afforded, show how erroneous are the conclusions which many derive from simple studying of tariffs. These goods, under the present tariff, are apparently protected by a duty of six cents per square yard, while, as I have shown, the manufacturer is satisfied with a profit of one or two cents per running yard; and in ordinary times, the prices being regulated by home competi-



tion, no directly competing goods being imported, are mainly independent of duties.*

The products of the woollen manufacture are so various, that I should fail in attempting any thing like a systematic illustration of my subject from this industry. When we consider the vast extent to which this manufacture has attained,—its annual products being valued, from returns made in 1864, when it was most prosperous, at \$121,000,000, — we perceive that this is an important proportion of the product of the whole manufacturing world. It cannot be doubted, that the existence of this manufacture has an important effect upon the general prices of woollen fabrics in the commerce of the world, and that it would be utterly impossible to clothe ourselves with comfort and decency without our domestic manufacture. This manufacture contributed its part during the war, having supplied cloths for the army and navy in three years, which consumed 200,000,000 pounds of wool. It was mainly through this manufacture that our army was better clothed than any large army ever brought into the field; and its cloths are officially stated to have been stronger than those in use in the armies of Europe. This manufacture felt more sensibly perhaps than any other the stimulus given by freedom from foreign competition during the period of the war. Consequently it has suffered more than any other by the flood of importations which overleaped the too feeble barriers of protection left at the restoration of peace. While all branches of the woollen industry were extended during this period.

^{*} The tariff provisions intended to apply to this class of goods, are rarely carried into full effect. Year after year, poor substitutes for the American dress goods, and therefore indirectly competing with them, which cannot be imported by any regular merchant who pays his duties without a heavy loss, are consigned from Germany to the country, and sold at the auction rooms, in the city of New York, where agents of the foreign manufacturers are located. Such sales could not be systematically made if it were not true, as stated by the United States Revenue Commission, that "fivergrown mercial parasites co-operate, in New York, to debauch and mislead our officers, and nullify the laws pertaining to our commerce and industry."

others were called into existence by the protection afforded by the war and the increased duties under the Morrill Tariff; among which may be specified the manufacture of braids, which are woven upon small machines, from worsted varn. Insignificant as this article appears, it is one of important consumption, for bindings for men's clothing and for ornamenting ladies' dresses. Before 1861, our whole consumption was supplied by imported articles. The prices were from 621 cents to 75 cents per dozen. They rose during the war to \$1.60 to \$1.65. From 2,500,000 to 3,000,000 dozen a year are now manufactured, single establishments turning out from 10,000 to 20,000 dozen a week. The foreign article is now wholly supplanted by the domestic, of a better quality and at a price of about 75 cents currency against the former price of 75 cents gold. It is a singular circumstance, that, on the very day that the recent tariff, which largely increased the duty on braids, was published, the assurance of freedom from foreign competition and frauds gave such encouragement to the domestic manufacturers that they might safely enlarge their production, that the prices fell five cents per dozen, and have remained at that reduced rate.

The last-cited branch of industry may be said to contribute only to the fancy of the community. There are other longer-established branches, essential to the necessities, and literally to the comfort, of consumers. Such are the manufactures of blankets and flannels. The manufacture of blankets was brought into successful operation by the highly protective tariff of 1842, we having failed of any good results before that time. Under the stimulus of this measure, our manufacturers attained such skill, that samples of American blankets from year to year were sent for from England, to be imitated in style and finish. Nothing can surpass the best domestic fabrics; and nothing is made here so poor as the cheaper imported blankets. The prince of dry-goods dealers in New York

has repeatedly asserted, that he could not afford to keep stocks of American blankets, because purchasers would not buy foreign blankets, if offered by the side of American goods. No comparison of prices can be made with articles formerly made or with imported articles, on account of the improvements in the styles of goods. It is sufficient for my purpose, to show that this prime article of necessity is furnished by our own industry, and at prices effected by domestic competition, very few blankets being imported. How stringent this competition is, is shown by the fact, that blankets, which cost during the war \$12, are now sold for \$5.50, a pair. A great economy in production, of which consumers receive the benefit, has been effected in this, as in other branches of the woollen manufacture, by the saving of stock. Wool has such indestructibleness and durability, that every sound fibre, however it may have been mixed with foreign substances, can be, and now is, converted to use. Thirty years ago, in the infancy of our manufactures, this was not appreciated. Piles of waste and dirty wool, or of short staple and bits of yarn, all containing sound fibre, such as is now usefully appropriated, were allowed to accumulate, to be sold at best for manure, or to be thrown into the adjacent river which moved the mill. The saving from utilizing such material is said to be equal at least to the profits from improved machinery.

The manufacture of flannels is another branch of our woolen industry, in which we have practically secured independence. Cards of opera flannels, made of the finest American fleece, from the pan-handle of Virginia or the Silesian wool of New York, may be seen, upon which specimens of eighty-six distinct colors or tones and hues are displayed. The old notion that Americans cannot dye good or fast colors is exploded. The French opera cloths sold in New York are mostly of American production. Our markets are supplied, not only with these finer fabrics, but with colored and checked flannels

of coarser texture, now largely used for men's use; these flannels having largely taken the place of the cotton or linen shirt, while the old flannel under-shirt is replaced by a knit garment.

One of the most distinctly marked of our indigenous manufactures in this branch of industry, is that of Dommet flannels, which originated with Mr. James Johnson in 1835, the idea having been suggested by the necessity of using up a quantity of cotton warps provided for a mill making satinets, which had proved unprosperous. This fabric is composed of a cotton warp, with a filling of wool, and is uncolored. Its principal merit is, that it shrinks but little in washing. It came into use at first as a substitute for the linsey-woolsey stuffs originally of household manufacture, worn by working-women for under-petticoats. So extensively has this serviceable article come into use, particularly in New England, where the greater proportion of the goods are consumed, being admirably fitted for under-garments in the variable climate of the East, that a single house manufactures 300,000 yards a year. This article, being made now by the representatives of the original manufacturer, without any change in quality or texture, presents a proper subject for comparison of prices. It originally sold for 20 cents, in 1855 for 14 cents, and at present for 37 cents, but with cotton and labor at double price. In this article there is no foreign competition. It is referred to as illustrative of the advantage of the existence of a domestic manufacture, in supplying a fabric exactly suited to the wants of consumers.

No feature of American domestic life has been more noticed by foreigners than the universal use, in this country, of carpets, even in the humblest homes. It is a significant feature, for a cheerful home is the most refining of all social influences. The higher civilization of the masses of our people, and the capacity of our domestic industry, have reciprocally

acted to produce this American peculiarity. The existence of the carpet manufacture among us, and its capacity to contribute to that sense of comfort which we have inherited in our English blood, is eminently due to protection. This will be obvious when we reflect that in this, more perhaps than in any other, branch of the woollen industry, the manufacture, to be carried on advantageously, must be conducted in very large and costly The largest woollen establishment in the establishments. world is the carpet factory of the Messrs. Crossley, in England. It is said that not less than three years' time is required to complete the appointments of a well-conducted establishment. So great are the difficulties in instituting such an establishment, that for fifteen years no new one of importance has been put in operation in this country. It is clear that capital could not be found to embark in such enterprises without the assurance given by a protective tariff. But in no other branch has the protected industry paid more rapidly the debts due for its education. This industry has not only acquired such skill as has made the products of its looms, even in the fabrics of luxury, vie with any in Europe: it has cheapened the products of European looms, as well by competition as by the contribution of its inventions. The best English carpets are actually woven upon power looms invented by American genius. contribution by America to England of the carpet loom received from France, with its beneficent substitution of power for painful hand labor, still further completes that circuit of the arts described by the poet of "The Fleece," in his apostrophe to the loom: -

"The loom, that long renowned, wide envy'd gift Of wealthy Flandria, who the loom received From fair Venetia; she from Grecian nymphs; They from Phenicé, who obtained the dole From old Egyptus. Thus around the globe The golden-footed sciences their path Mark, like the sun enkindling life and joy."

It is stated confidently by eminent carpet manufacturers, that, since the establishment of the carpet manufacture in this country, the cost of the goods to the public has been reduced more than twenty-five per cent through the economies introduced here upon the processes in use abroad, and the gain is believed to be equal to from thirty to forty per cent. Fortunately we are able to obtain from official data more precise statements as to the reduction in price effected by the establishment of this industry. The facts which follow came to my knowledge officially, in a judicial investigation at the United-States Patent Office. Before 1842, all three-ply and ingrain carpets were woven on hand looms, the motive power being furnished by the weaver. Numerous and costly experiments to weave ingrain carpets by power looms had been made in England, but had proved unsuccessful. Mr. E. B. Bigelow, in 1842, —the period, it will be observed, of the inauguration of the most important protective measures in behalf of all branches of the woollen industry, - conceived a series of devices for making the carpet loom automatic, so that the costly labor of men might be dispensed with, and the whole process of weaving might be conducted by girls or boys. After laying his plans before many manufacturers, he succeeded in engaging the attention of the treasurer of a manufacturing company in Lowell, who had the intelligence to perceive the importance of the undertaking, and to understand the grounds of its probable success. Through him he made an engagement with the Lowell company, by which the exclusive right to use the inventions then existing, or afterwards to be made by the inventor, respecting the weaving of ingrain carpets, was conveyed to the company. The construction of an establishment with the newly invented machinery was undertaken at the cost of many hundred thousand dollars, the fixed capital of the company in the carpet works being nearly a million of dollars. This vast outlay was made upon the double protection given

by the existing tariff, and the exclusive right under the patents. The enterprise having accomplished more than was expected from it, the Hartford company acquired from the Lowell company the right to use the invention.

While the receipts of the invention from his royalty were insignificant, the benefits to the public from these inventions and these protected enterprises are the production of superior goods; the texture of the power-loom carpeting being more uniform, the selvage more even, and the matching of figures more perfect, besides a material reduction of cost. The actual saving to consumers has been thus calculated: Prior to the introduction of the power loom, the Lowell Manufacturing Company paid as wages for weaving, by hand loom, the description of carpeting known as two-ply, 11% cents per yard, and for three-ply 25 cents per yard; whereas, with Bigelow's power loom, they only pay for weaving the former article $2\frac{50}{100}$ cents per yard, and for the latter $2\frac{83}{100}$ cents per yard; thus showing a saving by the power loom in wages paid for weaving of 9_{100}^{18} cents per yard for two-ply, and 22_{100}^{17} cents per yard for three-ply, being an average of 15_{100}^{67} cents per But the saving in wages is partly neutralized by the more costly repairs of the power-loom machinery, and interest on the larger investment of capital required therefor, so that the average net saving by the power loom is estimated at ten cents per yard. Accurate returns from the mills of the Lowell and Hartford companies, up to April, 1863, show that the number of yards of carpeting woven upon looms was 25,964,185 yards. Thus the saving to the public by this invention has been two million five hundred dollars. That the saving in the price of the manufacture of carpets has accrued to the consumers is evident from the fact, that, at the time Mr. Bigelow's invention was introduced, the wholesale price of the best quality of two-ply carpeting was from 85 to 90 cents per yard, and of three-ply from \$1.30 to \$1.33 cents per yard;

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whereas in 1860 the former description of goods, power-loom wrought, of a better quality than the hand-loom wrought, sold for from 70 to 72½ cents per yard, and the latter from 95 to 97½ cents per yard, making an average reduction of over twenty per cent. It is worthy of observation, that the ingrain carpets are used not so much by the wealthy as the middle classes; and thus the increased cheapness, so manifestly due to protection, has been a direct boon to the great body of consumers.

In regard to the most important branch of the woollen manufacture, that of cloth, it is difficult to make comparisons, on account of the great changes in the fabric commonly worn, and changes in the prices of wool. An essential change in the styles of cloths was made by the introduction, in 1834, by M. Bonjean, of Sedan, in France, of fancy cassimeres, a style in which there may be an infinite variety in tints and figures. Before this period, the colors of nearly all fulled cloths were uniform, and the cloths were highly finished on the face. The production of fancy cassimeres now gives employment to the greater number of our mills, the plain-face goods being comparatively little in demand, though made of great perfection in some of our mills. In the production of fancy cassimeres for general consumption, we are in no respect behind foreign manufacturers in machinery or skill. We have produced a machine for weaving these fabrics. — the Crompton loom, capable of weaving 24 sets of harnesses, thus having an almost infinite capacity for varying the fabric, - which is declared by experts to be the best in the world for this purpose. Our machinery is capable of fully supplying our whole population; and hence domestic competition is so active, that the prices to consumers must always be close to the cost of production. A careful inquiry among the most experienced and oldest dealers justifies the assertion, that cloths, as a whole, have never been so cheap in this country as at the present time. It is the opinion of many of the oldest dealers whom I have consulted, that, in certain styles where comparison can be made, such as black broadcloths and cassimeres, the prices of American cloths are much less than foreign cloths of the same quality forty years ago. The present great reduction of prices may be temporary; as many goods are doubtless offered below the cost of production, and the want of protection to other branches of industry doubtless diminishes the demand. In any view of the case, there can be no question that the cost of cloth to the great class of American consumers has been materially diminished by the domestic manufacture. Assuming that the consumer pays the whole of the duty given under the present tariff, the amount which he pays to support a system, the effect of which is continually to reduce the cost of material for clothing while at the same time it supports the government, is comparatively insignificant. It is shown by data, which, subjected to most rigorous scruting in Congress and elsewhere, have never been impeached, that the whole amount of duty given to protect the manufacturer, on the cloth for a full suit of clothes, at an average cost of fifty dollars for the suit, is only one dollar, sixty-three cents and four mills, or a little over three per cent of the cost of the whole suit.* The assertions here made may be doubted by young men who pay such enormous prices to the fashionable tailors. But they have only to make the experiment, and they will find that the cost of the cloth furnished will be only from one-third to one-half of the sum which will be charged for mak-

[•] The published statement of the Executive Committee of the "National Association of Wool Manufacturers," relative to the proposed duties on wool and we dens, addressed to the United-States Revenue Commission, May, 1866, contains a table, prepared from authentic data, showing the operation of the then existing and proposed tariffs, as affecting the consumer. The table shows, that, under the proposed tariff on wool and woollens, which has since become a law, the whole duty on the cloth required for a full suit of clothes, made of fancy cassimeres, costing, at prices then prevailing, fifty dollars, would be \$4.77 $_{100}^{1.0}$; the duty on the wool would be \$2.01 $_{100}^{1.0}$; the duty on dyestuffs, and other materials, $80.10 \,_{100}^{1.0}$; the charges on account of duties, $80.21 \,_{100}^{1.0}$; the Internal Revenue tax, at six per cent, $80.81 \,_{100}^{1.0}$, and the duty for the protection of the manufacturer, $81.63 \,_{100}^{0.4}$; or \$3.26 per cent of the whole cost of the suit of clothes.

ing and trimmings. I make no complaint against the tailors, who are doubtless largely controlled by the trades' unions of their journeymen. Neither do I complain that the workmen should get all they can for their labor: I simply wish to show that the grievance of dear clothing should not be charged to the manufacturer and the tariff.

It is not unfrequently urged, that our domestic textile industry does not supply the varieties and styles demanded by fashion and luxury. A certain class of consumers would never be satisfied with home products. See how, a hundred years ago, "The British Spectator" denounced the passion of his fair countrywomen for French frivolities. An English poet of his period thus compares the foreign and home products of the loom:—

"Nor do their toils and products furnish more
Than gauds and dresses of fantastic web
To the luxurious; but our kinder toils
Give clothing to necessity."*

It is really no objection to a system which enables domestice manufacturers to supply the great mass of consumers with necessities more cheaply than they can obtain them abroad, that it increases the cost of novelties and luxuries not produced here. This is precisely what the exclusive desire who select goods for the adornment of their persons or houses, because they cannot be bought by the masses. If our fair friends are willing to pay for a Turkish rug three times the price of an American Wilton, actually superior in real beauty and in intrinsic value, simply because it is costly and rare, why should not the Government obtain a revenue from such tastes as well as from the grosser appetites of men? Laces and diamonds are really no more necessary than cigars and whiskey. "Obviously," says Professor Bowen, "in respect to all articles which

^{*} Dyer's Fleece, book iii.

are used only for purposes of ostentation and display, the only strong argument against a protective tariff, that it operates as a tax upon consumers by slightly increasing the prices of the commodities on which a duty is imposed, ceases to have any weight whatever. If the duty were removed, consumers would save nothing; for they would abandon the use of the cheapened commodity, and seek out one of higher cost, not because of its superior quality or convenience, but because its high price renders the possession of it a token of wealth."*

A well-developed cotton and woollen manufacture nourishes many auxiliary arts, not the least of which is the manufacture of chemicals, in which branch of manufacture, particularly in Philadelphia, we have made commendable progress. I do not propose to enlarge upon this manufacture, and refer to it merely to show, by one example drawn from this industry, the public loss which may be sustained by the abandonment of the protective policy. The art of making soda ash, as now practised, was due, like the first impulse given to so many other industries in this country, to a condition of war which shut out the ordinary supply. For years France had depended for the supply of soda upon importations of borilla or crude carbonate of soda from Spain. When the commerce between Spain and France had been suppressed by the war of the Revolution, the committee of public safety appealed to the French chemists to point out a means of supplying this article from domestic sources.† At this time, a student of medicine named Leblanc, while attending the chemical lectures of Darcet, at the College of France, was deeply impressed with the remark of the savant, that any one who would invent a method of obtaining soda from sea water or common salt, of which soda forms the base, would be a benefactor to France,

The Principles of Political Economy applied to the Conditions, the Resources, and the Institutions of the American People, by Francis Bowen, p. 477.

[†] Dumas's Chemie appliquée aux Arts, t. ii. p. 470.

and make his own fortune. Leblanc at once abandoned his medical studies, and devoted himself to experiments to obtain soda-ash for the arts, from the chloride of sodium. Being generously allowed to pursue his researches in the laboratory of the great chemist, he was successful in solving the problem. He established the manufacture at Marseilles, and put his products upon the market. The manufacturers of soda-ash from borilla, imported from India, which heretofore had been used, combined in denouncing his product, calling it "factitious soda." Finding no sale for his product, and foreseeing certain ruin unless he obtained assistance, he applied for aid to the French Government, showing the vast benefits which would accrue to the manufactures of France from his discovery. Vainly waiting from day to day for a reply to his petition, he sunk at length in despair, and blew out his brains. A few hours after, a courier arrived at Marseilles, but alas! too late, to announce that the Government had provided for the despairing inventor a competence for life and a pension for his family.† It has been well said, "Many a heart has been broken upon the wheel whose revolutions have made the fortune of thousands." This invention saved many millions to France, and many more to England, where the manufacture of sodaash by this process was afterward carried on upon a vast scale. The first effort to manufacture soda-ash in this country was made in Pittsburgh, - a favorable locality, from the abundance of coal, and facility of obtaining salt from saline springs,about 1850 or 1851, when the duty on this article was ten per cent ad valorem. Although the duty was hardly high enough to protect the American against the foreign manufacturer, it sufficed to induce capital to embark in the business. The manu-

[•] The term soude factique, originally given in derision, is now the commercial name of soda ash, in France.

[†] My authority for this statement is Dr. Charles T. Jackson, of Boston, who obtained the information at Leblanc's works at Marseilles.

facturers here were able, even under this duty, to compete with the English, who, to use their own words, as written to their agents in this country, were determined to "put out the fires of the American works." * To accomplish this, they authorized their agents to lower the price from ten cents to six cents a pound. Still the American manufacturers were able to compete, and struggled along, though with but little profit, until At this time the Eastern manufacturers of textile fabrics, suffering under the horizontal tariff of 1846, and despairing of a return of the public mind to the protective ideas of 1842, were compelled to make some compromise of their old principles, and adopted the theory of free trade in raw materials; a theory which, sound enough as applied to materials which could not be produced in this country, was unsound when applied to those which could be produced here, such as wool and many chemicals, which, though raw material to the woollen manufacturer, are ultimate manufactures to the chemist and farmer, requiring the raw materials of coal, hay, and grain. This theory prevailed in the tariff of 1857, which lowered the rate of duty upon soda-ash to 4 per The manufacturers of this article still struggled along, and kept down, by their competition, the price of the British product to 43 cents. By the tariff of 1861, soda-ash was made The effect was to completely crush out the American manufacture, and to raise the price of the British article in this country to from 12 to 15 cents. A great inconvenience, resulting from the withdrawal of the American product, is the irregularity and sometimes almost total deficiency of the foreign supply, a usual consequence of dependence upon foreign trade. When we consider that we consume at least forty thousand tons a year of this chemical; + that it is the most important of all chemical products for our manufactures, except sulphuric

^{*} Letter of Mr. James Park, jun., of Pittsburgh.

[†] We imported, in 1860, 70,853,312 lbs, of a declared value of \$1,411,015.

acid; that it is indispensable in bleaching, soap-making, paper-making, and in many other arts,—we must admit that the restoration through protection, of a manufacture which furnishes at home a regular and abundant supply to all these arts, would be no little boon to manufacturers and consumers.

In the vicissitudes of language, the term manufactures is held by modern writers to signify the reverse of its etymological meaning, and to apply, not to the products of handicraft occupations, but to denote the extensive products of art which are made by machinery with little or no aid from the human hand; so that that is regarded as the most perfect manufacture which most dispenses with manual labor. The shoe industry has risen in this country from the position of a mere handicraft employment to that of a manufacture; and, in the sense expressed above, is more perfect than the shoe manufacture of any other nation, because it makes more use of machinery.*

The shoe industry was commenced in Lynn, Mass., on a small scale before the Revolution, the art of making ladies' shoes having been introduced as early as 1750 by a Welsh shoemaker. During the Revolution, while foreign articles were excluded, the industry had made sufficient progress to become a characteristic business of the town, and it performed important service in supplying shoes to the army. After the war, the business was so totally prostrated by foreign importations, that able and skilled men offered to bind themselves out for a year's constant labor simply for their board. By the first Tariff Act passed after the adoption of the Constitution, July 4th, 1789, the preamble of which declares one of its objects to be "the encouragement and protection of manufactures," provision was made for boots and shoes, by a duty

[•] The facts and views which I have presented in relation to this industry have been mainly derived from a gentleman of Lynn, who, having risen from the shoemaker's bench, has signally demonstrated, by his eminent achievements in public life, the fallacy of the maxim, familiar since the time of Horace, "Let the shoemaker stick to his last."

on the former of 50 cents a pair, and on the latter of 7 cents a pair. While these duties had much effect in checking importations, they were not regarded as sufficient. About the period of 1793, a young man named Ebenezer Breed, who had moved from Lynn to Philadelphia, which city had become the seat of the national government, being familiar with the necessities of the shoe business in his native town, suggested to a Quaker gentleman named Zaccheus Collins, also a former citizen of Lynn, who had attained wealth and respectability in Philadelphia, that the business of their native town would be greatly benefited by the increase of the duties on foreign boots and shoes. Collins assented to these views, and promised his co-operation upon the condition that Breed should obtain, through influences brought from Lynn, a resolution of the General Court of Massachusetts, recommending the further protection of this industry. This resolution having been obtained, Collins proposed to bring to bear a kind of influence which is still supposed to have no little effect upon Congressional action. He invited to a formal party-dinner a number of the leading men in Congress: among them Mr. Madison, Breed being also invited to present the demands of the Lynn shoemakers. The result of this social influence was the incorporation into the Tariff Act of 1794 of a provision adding to the duty already existing on boots 25 cents per pair, and to that upon shoes, 5 cents per pair; these being the only manufactures for which an increased duty was provided by that This duty was effective, because specific. The consequence of these two Acts was the firm establishment of the boot and shoe industry of Massachusetts, one of the earliest and most valuable fruits of our recently acquired independence. This industry, though gradually enlarging, languished from time to time, as during the depression which preceded the tariff of 1842. But, like all other industries, it received a new impulse from that great revivifying measure. But it

hrough the protective influences of the late war, aided , the labor-saving inventions of American origin which had come into use, that this industry became fully developed into a true manufacture, thoroughly independent, and capable of responding to all the requirements of the country. The shoemakers' shops are now largely replaced by extensive factories worked by steam-power, with machines for cutting and rolling the leather and shaping the soles, and with machines for pegging and sewing so efficient, that it is declared that one sewing machine, expressly adapted for this work, will sew 200 pairs of shoes in a day. It is asserted by persons competent to pronounce an opinion, that we furnish boots and shoes more cheaply than they could be obtained without duties from abroad in any considerable quantity. The styles are, particularly of ladies' shoes, unsurpassed in graceful appearance and excellent workmanship by any made in Europe. Parties from this country have even opened factories in England to manufacture shoes upon the American plan, and with our machinery. The American leather, the manufacture of which was protected by the early tariffs, is said to be superior to that which enters into ordinary consumption in Europe. Before the war, American leather was largely exported to England, the prejudice which retarded its introduction having been finally overcome. Although the continuance of duties is desirable to protect against the surpluses and fluctuations of foreign trade, the present tariff has actually no effect upon prices, which are regulated wholly by home competition, no ladies' shoes being imported, and only a very few French boots, to gratify caprice or fashion. This industry has grown, mainly through the protective influence of the early tariffs, from a mere handicraft to a national manufacture; from a product, measured by its exportation to Southern markets, of 800,000 pairs of shoes in 1795, to a product in 1860 of over 80,000,000 pairs of shoes and over 11,000,000 pairs of boots,

of a value of over \$37,000,000 in the State of Massachusetts alone. With the slow processes of tanning abroad, the absence of hemlock bark, the necessity of relying almost exclusively upon chemicals to supply tannin, and with the want of mechanical appliances, all Europe could not supply us with leather and shoes at quadruple the price we pay at home.

There is another industry upon which all these arts which minister to the comfort of man depend. While gold is but the measure of wealth, the instrument with which wealth is created is iron. It is the sword, the axe, the ploughshare, the anchor, the loom, the rail track, the steam engine. It is the basis of the world's material prosperity, and the proportion of its production and consumption the measure of the civilization of nations. The state of every mechanical art is determined by the perfection and the use of the tools which it furnishes. When iron is in demand, all labor is astir; when its consumption declines, the arts languish. Hence those who have studied the antiquity of man, and have traced his existence through the infinity of ages which modern researches have assigned for his being, -following him from caves to lake habitations, and thence to his present abode in tilled fields and cities, from the age of stone through that of bronze, style the period when the race culminated into civilization the "age of iron," as iron is both the means and the standard of human improvement.

Thirty years ago, our whole production of iron was but 50,000 tons, and our largest furnace was not capable of producing more than 1,500 tons a year. We manufacture now 1,500,000 tons; and have single furnaces which produce 15,000 tons a year, and single rolling-mills producing 1,300 tons of railroad bars per week. The development of our iron manufacture to its present colossal proportions is one of the most striking proofs which our whole industry furnishes of the indomitable energy of our people. That this industry

should exist at all, is a wonder. No other has been subjected to such vicissitudes or such temporizing legislation. No other has had so formidable a competitor. It has had to contend against a combination of British capital, so vast, so patient, and so far-seeing in its purpose of aggrandizement, that it could throw its products upon the markets of the world, for year after year, without any profit, and wait until full indemnity might be secured for present sacrifices by the monopoly of markets of other nations, whose industry had been broken Our iron manufacture has had, down by cheap imports. besides, to contend with a people who have wasted the raw material of their mines with a prodigality whose consequences the wiser men of England even now look upon with dismay; and also with fluctuations of prices in England, varying from below the cost of production to one hundred and fifty per cent upon the actual cost. The iron industry has been able to obtain a foothold in this country only through the brief respites which our legislation has afforded from this competition. That it owes its existence to the brief periods of prosperity due to protective legislation, is capable of demonstration. Its production was doubled during the protective period from 1828 to 1832, having reached in the latter year the quantity of 210,000 tons, although our population had increased only twenty per cent. For eight years later, under a free-trade policy, till 1842, although our numbers were increasing at the rate of thirty per cent, our production made no progress, having at the end of this period reached only 232,000 tons.

From 1842 to 1848, under protection, with a growth of population of only 20 per cent, it trebled, having reached the amount of 800,000 tons in 1848. Abandoned, during the twelve succeeding years, to the tender mercies of British iron-masters, who had full sway under the tariff of 1846, the production fell, in 1852, to less than 500,000 tons.

The protection having been greater under the ad valorem

system, as prices rose in England by the very destruction of our works, our production gradually rose, our whole production and consumption in 1860 being about 1,000,000 tons; a very moderate increase, compared with the growth of our population, which had increased 40 per cent. What remained of protection had been sufficient to keep in a state of preparation the skill and machinery of this industry for the imperative demands imposed upon it by the war of the rebellion. In five years, under the influence of the Morrill tariff of 1861, and the exclusion of foreign iron during the war, the production attained the amount of a million and a half of tons.

To come to the application of the facts connected with this industry to the solution of the question under discussion,—the benefits of protection to the consumer. It is assumed that the material progress of a nation is in proportion to its consumption of iron. The whole body of consumers constituting the nation has derived incalculable advantages from the establishment of this home industry through protection, because we use iron abundantly only when it is produced at home. We

[•] In illustration of the incidental benefits of this industry, I venture to reproduce a passage from a paper published by me in 1850, in which I presented the results of my personal observations at the Katahdin Iron Works, in Maine.

[&]quot;The influence of the industry of iron upon the prosperity of an agricultural people, will be better seen by taking a closer view of the actual operations of an iron establishment. We will take the case of a charcoal furnace and forge at the North. The location of the establishment, for obvious geological reasons, is in an interior positive. remote from the great markets, and in a country whose mountainous surface offers a scanty return to the labors of the husbandman. The erection of iron works is detarmined upon. An idle stream is dammed up, and forced to the aid of human industry. A sawmill is erected. Timber, which would not bear transport to a distant market. becomes suddenly valuable. The worthless clay and sand are converted into tricks. Building stone is quarried and hauled. The neighboring farmers find constant employment for themselves and teams, during the intervals of their farming labors, in the coarser mechanical work, or in the transportation of materials. The store and banding-house are built. The workmen abstracted from farming pursuits must be fed. A market is found for the surplus products of the farm, - for milk, potatoes, hav, and all vegetables which could not be carried to a distant market. The regular work of the furnace and forge commences. The young men, who must earn the money to buy their farms, find constant employment at the fire or hammer. But the greater portion of the labor must still be performed by the farmer. The winter, which he had before

do so because we can exchange for the iron produced here our agricultural products and the products of domestic manufactures, which cannot be exported to pay for iron abroad. A careful comparison of statistical and commercial returns will show that the deficiencies of the home production of iron have never been made up by importations.

Our home production of iron benefits consumers, not only by enabling them to consume more iron by the exchange of their own products, but it keeps down the prices of foreign iron. After the fires of our furnaces and rolling-mills had been extinguished by the tariff of 1846, and our increasing wealth and population, through the influx of gold from California, had created a demand for the extension of our railroads, the demand for foreign iron revived; and for four years, from 1851 to 1854 inclusive, we imported a million tons. British iron, which had been sold here in 1849 for 40 dollars a ton, while American iron, worth twice as much, was offered at 50 dollars, rose to the enormous price of \$80 a ton. The sliding-scale

spent In comparative idleness, doing little more than feeding his stock and getting in his firewood, becomes the busiest season. This is the best time to transport ore and wood to the furnace, and iron to market. Three or four cords of wood must be supplied for every ton of iron made. He cuts and hauls this wood, and thus receives wages for clearing new land for his crops, whereas, before, the trees were felled and burned up upon the land at a great expense. From these various employments he soon derives means to improve his instruments of labor. He gets a better team, puts iron tires and axles to his carts, has new chains, bars, picks, and ploughs, to use on his farm, and stoves for diminishing the labor of his household. For these he has only to exchange his labor, without payment of a tax or profit to the merchant and carrier. Constant occupation of his time doubles the products of his hands, and the market at his door quadruples the value of his land.

The increase of the material prosperity of the country is not the only result achieved by well-employed and rewarded labor. Newspapers, books, schools, churches, are the investments of the surplus products of the laborer. With the prosperity effected by the production of wealth, spring up the desire and effort to extend its blessings among the unfortunate. We can point to a small iron manufacturer in Connecticut, who has devoted all the profits of a small furnace and farm, in and upon which he labors every day with his own hands, to feeding, clothing, and educating, at his own house, ten or twelve orphan children, whom he has rescued from poverty and crime, and is training to be Christian teachers and missionaries." — Memorial of Iron Manufacturers of New England, p. 29.

of duties, which the American iron-masters asked without obtaining, would have preserved the price of American iron at 50 dollars per ton. Our railroads paid, in consequence of the destruction of American competition for want of adequate protection in those four years, not less than thirty millions of dollars. Such facts seem to place it beyond doubt, that the aggregate cost of iron to American consumers, during the eight years preceding 1854, was greater than if the reduction of duties through the tariff of 1846 had never taken place. The cheap imports offered to us by England have proved but snares and illusions. In the race of nations, cheap imports are like the golden apples in the fabled race of Hippomenes and Atalanta. They serve only to lure us from the course, and to secure for our rivals the richer prize.

Attempts to make cast-steel in this country have been continued for more than thirty years; but with so little success, that, until within the last five or six years, it was believed that we should be always compelled to depend upon foreign mines and labor for this indispensable material for tools and machinery. It was said that our ores were wanting in the steely propensity found in the Swedish irons, of which England had the monopoly; and we were warned against attempting to nourish this manufacture through protective duties, by reference to France, which was said to have failed, even by the highest premiums and prohibitory duties, to attain any excellence in this manufacture.† Hence, until 1861, the duties on steel were kept even below the revenue standard. Within the last five or six years, it has been demonstrated, that the steel-producing qualities exist in American iron; and many of the best edgetool manufacturers and machinists in the country testify that

^{*} This is the conclusion of one of our most eminent political economists, and a disinterested observer, Prof. Bowen. Principles of Political Economy, &c., p. 213.

[†] See Mémoire sur la Fabrication et le Commerce des Fers à Acier, pur M. F. Leplay. Annales des Mines, quat. ser. i. 9.

steel, both cast and rolled, made from American iron in Pittsburgh, is equal in quality to the best of English make.

The capacity of the works in and around Pittsburgh alone, some of them employing a capital of over half a million of dollars, is estimated at seventy-five tons a day. The acquisition of this industry to our national resources may therefore be said to be an accomplished fact. Brief as has been its history, it has already demonstrated its efficacy in controlling foreign prices.

For many years before the introduction of American caststeel, while the duty was only 12 per cent ad valorem, the
price of the best English steel averaged 16 cents per pound.
As soon as it was found that the manufacture in this country
was likely to be a success, and that the American steel was
offered a little below the English rates, the prices of English
steel were reduced until the best imported cast-steel was sold
at 13 cents a pound. A memorial addressed to the Senate,
signed by the officers of several important railroad companies,
states that previous to the present extensive preparations in
this country for producing Bessemer-steel rails and forgings,
foreign agents charged \$150 per ton in gold for the same rails
that they reduced to \$110 per ton in gold, when they became
aware that such preparations were being made. Mr. Cattell,

[•] Six different establishments for making Bessemer steel, each capable of producing daily from thirty to forty tons, are now in operation, or in the course of construction, in this country. The leading iron manufacturers of the country, in whose company I recently witnessed the operations at the works of Messrs. Winslow and Griswold, at Troy, N.Y., declare that all the difficulties of this manufacture are overcome, and that the making of steel by the pneumatic process,—the greatest improvement in metallurgy which has been made since Cort's process of puddling,—with judicious protection, will be definitely established in this country. The benefits which consumers will derive from the establishment of this manufacture are incalculable. A steel railway bar, costing not twice as much, will last thirty times as long as one made of puddled iron; and it is said by those best informed, that, so soon as the facilities for manufacturing the Bessemer metal shall be adequate to meet t'ie demand, this metal will come in use for making all the axles and wheel tires of our carriages and wagons; the shoes of our horses, oxen, and mules; the ploughs and harrows, spades, hoes, and rakes of our farmers; the bars and mattocks, the hammers, sledges, and picks of our miners;

in an admirable speech upon the tariff question delivered in the Senate last winter, makes the following statement: "A number of original invoices now in my possession from prominent English steel-manufacturing agents on this side, dated in the years 1850, 1852, 1853, 1855, and 1857, show that during these years, when the duties on steel were far below the present rates, being as low in the year 1857 as twelve cents ad valorem, equal to about one and a quarter of a cent per pound, as shown by the Custom-house valuation, the best cast-steel averaged fifteen cents, and the maximum sixteen and a half cents. Invoices and offers made by the same manufacturers' agents during the present month (January, 1867), the existing tariff upon the same grade being three cents per pound, shows an average decline of one and a quarter of a cent per pound. This comparatively new branch of manufacture, and the figures I have given (says Mr. Cattell), shows that, working under a protective duty of three cents per pound, the energy and enterprise of our own people have forced the English manufacturer to reduce his rate one and a quarter of a cent per pound; saving to the American consumer twentyfive dollars on every ton used." At the time of the Trent affair, when we were upon the verge of a war with England, the steel manufacture had not been developed, and we were mainly dependent upon that country for the raw material of our bayonets and sabres, and what was more vital, for the tools for boring and fashioning our guns and cannon. A conflict with England would have severely taught us the lesson that no country is safe which does not rely upon its own industry and resources for every muniment of war.

There is no reason why, with adequate protection, the industries of steel and iron should not obtain that absolute

nails and screws for buildings, bolts and nuts for machinery. &c., all of which will be made better, and, in proportion to their quality, cheaper than they are now produced.

— See Paper on the Pneumatic Process, by T. S. Durfee.

independence which the American manufactures of iron and steel, denominated hardware goods, now enjoy. I have taken some pains to ascertain the position of the hardware manufacture in this country, and its capacity for supplying the wants of consumers. Forty years ago, as I have been informed by the oldest of the extensive dealers of hardware in New England, American goods were an exception in the hardware At the present time, in taking an account of stock, fivesixths of the hardware, including heavy goods, is of American manufacture. We now manufacture all the styles required for our consumption; and there is no English article imported for which there is any demand which is not furnished by our own manufacture. The American axes, shovels, spades, and hoes have wholly taken the place of the foreign tools. Nothing like them in shape or finish is made abroad, and they are largely exported. A single axe factory has made 1,500 axes per day for 300 days in one year. The original manufacturer of the most popular shovels congratulated himself when he could make ten dozen per week. His sons now make regularly 2,000 dozen per week. In nearly all carpenters' tools we excel. The American socket or framing chisels take the place of the English, although English furmer chisels and plane irons, for hard wood and ship-carpenters' use, are preferred. We import no long saws or circulars; of other saws, the consumption is about divided between the American and English. gimlet is of American design, and principally of home make. The screw auger is also an American design and has replaced the English pod auger. It is the same with all bits of that family, though English pod-bits for countersinks are still imported. In the class of locks of all kinds, American articles are cheaper, simpler, and of better workmanship. Foreign locks are imported only for the variety in the patterns of the keys and wards. American butts and hinges of all kinds are cheaper and better, and exclude the foreign. Wood screws, in

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shape and design, are American, none being imported except such as are made under foreign patents of American inventions. In cutlery of all kinds, table and pocket, the medium American qualities are cheaper and better than those of foreign importation, which are confined to the very low, or very high or fancy articles. It is said by those who have watched the hardware business for many years, that the introduction of every American article to replace the foreign has had the effect to lower the price of the latter until it has generally been driven from the market. Every year adds to the list of the small products of this class of manufacture. These manufactures have grown up without any advantages of cheap, raw material, either of coal, iron, or steel. They have been clearly the products of protection.*

In presenting the thread of argument upon which I have strung these illustrations of our own dependence upon home industry, which could be continued indefinitely, I have not hesitated to repeat the term protection, to which, I am aware.

Our progress in many industries which are sometimes referred to as having derived very little benefit from protection, is to be attributed to the skill nourished by the protected manufactures. Our machine shops originated with our mills, and the power of applying machinery, so characteristic of our people, has been developed by our man ufacturing system: it is therefore one of the incidents of protection that we make the best watches in the world by machinery. The Waltham watch factory lies alongside of the first power-loom cotton mill. It is this power of applying machinery which has enabled us to excel in the manufacture of those musical instruments which can !principally made by machinery, -such as guitars, flutes, and pianofortes. Visions must be made wholly by hand, and in the manufacture of these instruments we have attained no success. Heavy machinery was first applied to the manufacture of silver plate, formerly made with jeweller's tools, at Providence, R.I., one of the earliest seate of the cotton manufacture. I visited one establishment, in 1864, when two-and-a-b-' tons of silver were in the process of manufacture. Wherever possible, machinery was substituted for manipulation. Silver was rolled into sheets between rollers weighing fifteen tons, and pressed by heavier dies than those in use for striking coin. The war-, made from designs furnished by highly-paid artists, was unsurpassed in perfection of finish. If we ask how the wealth is produced to bring these luxuries into dense ! even in a time of war, we have only to look around the little State where this manufacture flourishes, and see its diversified industry, aided by the large use of machinery. enabling its population to pay a taxation, per capita, of \$22.58, while the agricultural State of Tennessee pays a tax of only \$1.36 for each person of its population.

some who sympathize with me in opinion object. No better term, I think, has ever been suggested to express the precise idea which the word "protection" implies. It is the word used by the early statesmen in the preamble of the first American tariff, to denote their object in aiding our home industry by legislative action. It expresses the precise object of such legislation,—that of defending against the assaults of other nations the labor of our own, so that our industry may be as well protected and as free as our soil, and that the country may have a real free trade of its own, and not one imposed upon it by the selfishness of other nations. Its object is, that our people may enjoy in full measure the happy privileges of a country to which, as the great statesman of Russia has said, "God has given such conditions of existence, that its grand internal life is enough for it."

It is obvious that my argument, that protection is a boon to the consumer, is a hypothetical one, so far as it implies that there is a class worthy of consideration who are consumers only. In this country we are all producers as well as consumers. The man of science who discovers the laws of mechanics, the scholar who teaches them, the inventor who applies them to the labor-saving machine, the official who prepares the patent titles, the lawyer who defends them, the clergyman and physician who preserve the physical and moral health which make invention possible, are equally producers with the mechanic who makes the machine, the capitalist who employs it, the merchant who distributes its products, or the farmer who feeds them all. Each contributes some useful product, the labor of his mind or body, in exchange for the product of the other, who in his turn becomes a consumer. Production and consumption re-act upon each other, and, when pushed to the utmost, effect that diversity of industry which employs all the powers, intellectual and æsthetic as well as mechanical, of the community. The more varied the individual efforts, the more complete the concert of all, twining together like the tones of many instruments in some great symphony. Society thus becomes a harmonious whole, concordant with the origin of creation and the purpose of man's being, so grandly sung in Dryden's stately measures:—

"From harmony, from heavenly harmony,
This universal frame began;
Through the whole chorus of the notes it rang,
The diapason closing full in man."

LETTER

OF

MR. SAMUEL BATCHELDER.

MR. HAYES: DEAR SIR,—I understand your inquiry relates to the effect of the introduction of manufactures in this country, in supplying manufactured articles cheaper, and also to the production of such as are better suited to our climate and the wants of the population, than had before been imported.

Within my recollection, which extends back to the last years of the last century, most of the clothing for summer wear, - including shirting, sheeting, &c., - with the exception of a few articles of household manufacture, consisted of India cotton, a very light and unserviceable fabric, and made from cotton very inferior to that produced in this country. After the introduction of spinning machinery in England, cotton yarn was made suitable to be used for warps (which until that time were made only of linen), thus facilitating to a great degree the household manufacture of cotton cloths. After the introduction of power-loom weaving in England, -which was about the time of the commencement of the war of 1812,—the manufacture of cotton cloths was increased in England to such a degree, that, immediately after the close of the war, large quantities of British shirting were imported annually. These goods, though a considerable improvement upon the India cottons, were by no means suitable for common use; and it was not until the introduction of power-loom weaving in this country, that an article was produced that was of such a substantial fabric as to meet the wants of the people. The Waltham sheetings, a stout fabric, made from good cotton, sold without any starch or dressing, proved to be so serviceable and comfortable an article, that many mills were soon employed in supplying the wants of the country. And these goods not only proved to be better adapted for use in this country, but soon became an article of export to South America, India, China, and other parts of the world, where the people substituted American cottons in place of such as they had formerly imported from England. This was so much the case, that English manufacturers were driven to imitate the American fabrics; and English sheetings and shirtings, made of inferior cotton, were soon found in many foreign markets, bearing the stamps of Waltham and other American marks.

Mr. Nathan Appleton, in advocating the encouragement of American manufactures in Congress against the opposition of the South, very properly took the ground that manufacturing in this country would be the means of increasing the demand for Southern cotton, by substituting goods made from such cotton in foreign countries, instead of those manufactured from the inferior cotton of India. These American cottons not only proved to be better suited to the wants of this country, and to wear better than such as had formerly been imported, but were afforded at a much lower price.

In 1826, I commenced the manufacture at the Hamilton Mills, Lowell, of a twilled article known now very extensively as Jean. Until this time, the power loom had been principally confined to what was called plain goods, such as the sheetings and shirtings before mentioned. The Merrimack Mills were just commencing the manufacture of a finer article for printed calicoes. Very few articles of twilled cottons were imported, - such as were finished for particular articles of dress, and sold at a high price. So far as I could learn, these twilled goods were woven only on the hand loom in England, where the power loom had only been employed in weaving plain cloths. The production of those goods upon the power loom at as low a price, according to weight. as plain cloth, at once opened a market for them for various purposes for which they were better adapted than those woven plain. And, being sold at little more than half the price of any similar imported article, the demand for them was considerably increased in this country, and some were exported; and, among the first that were sent to Calentta, I was told a portion of them was sold for clothing the British troops in India, who, on account of the climate, being clothed in white, required something a little more substantial than the thin manufacture of the country.

In 1827, I commenced the manufacture at the same place of an article similar to the Jeans before mentioned, but of a stouter fabric, since well known as Drilling; on which thousands of looms have since been employed, making goods of precisely the same description, with the same number of threads both in the warp and filling, of the same average weight, with yarn of the same fineness, and without the least variation in any particular. These Drillings have gone into extensive use in this country, and have become generally known abroad, having constituted a large article of export.

I have a memorandum of the exports of *Domestics* to China alone, consisting principally of the above articles, as follows, in round numbers:—

```
15,000,000 yards.
In 1850
   1852
                         25,000,000
                         24,000,000
   1853
                         15,000,000
   1854
   1855
                          7,700,000
   1856
                         16,590,000
   1857
                          5,500,000
                         28,000,000
   1858
   1859
                         31,000,000
                                      ,,
   1860
                         32,900,000
```

as you see, continuing to increase, until interrupted by the rebellion.

Within the recollection of the present generation, sailors generally wore a blue and white check for shirting, which was mostly imported from England. In 1827 or 1828, I commenced the manufacture, at the Hamilton Mills, Lowell, of a twilled article, blue and white, since well known as shirting stripe. The sale of this article was moderate at first, and was not manufactured to any great extent, but was soon found to be more serviceable and suitable for the hard service of sailors than the thinner and lighter article they had been accustomed to wear; and coming into use by sailors on long voyages to India, and by the whalers in the Pacific, soon became so generally known, that there was a great demand for export to the Western coast of America, and is now so generally adopted for sailors' shirts, that it would require a considerable search to find a sailor wearing the blue and white check, formerly so common.

The foregoing facts within my own knowledge, and most of them connected with my own operations, afford a conclusive answer to your inquiry, — that, so far as the manufacture of cotton is concerned, the introduction of the business in this country has resulted in supplying a better and cheaper article for clothing—not only for the population of this country, but also for many other parts of the world—than could before be procured, either from the looms of India or Great Britain.

It may also deserve notice, that the manufacture of printed lawns for ladies' dresses was commenced about 1846, at Portsmouth, N.H. The cost of importing the article, at that time, was twenty-seven cents per yard. The manufacture of goods so much finer than any thing that had before been attempted in this country was at first unsuccessful, but, by perseverance, at length succeeded so far, that, while I was connected with the business, the article was made and sold at a moderate profit, until the price was reduced below twelve cents, and afterwards declined to nine or ten cents; affording another instance of the great reduction in price by the establishment of manufactures in this country.

So far as my observation goes, the establishment of almost every branch of manufactures in this country has resulted in improving the quality, as well as reducing the price, of such articles as we had previously imported; and very few branches of manufacture have been established otherwise than by protection in the commencement of the business, from the severe competition of importers and foreign manufacturers. This has been the result even in the manufacture of various articles of hardware, where the English had much greater advantages over this country from their abundant supply of iron and coal, which for a long time induced us to consider any competition with them as altogether hopeless. But the manufacture of locks, hinges, screws, firearms, and many other articles, has proved that American skill has succeeded in producing articles not only cheaper and better than could be supplied from abroad, but has induced the manufacturers in other countries to adopt our improvements in order to supply themselves.

Notwithstanding all the discussion that has taken place in regard to a tariff of duties for the protection of American interests, it seems to have been considered a new policy; and to have escaped notice, that protection has been the policy of the country from the organization of the Government. One of the earliest acts of the First Congress imposes a duty of six cents per ton on American-built vessels, and fifty

cents per ton on foreign vessels. This tonnage duty, and what have been called the *navigation laws*, have not only been a protection to that branch of business, but an absolute prohibition to foreign vessels to interfere in certain branches of our domestic trade; and even up to the present time, not only foreign-built ships, but those built in America, which have been sold to foreigners, on being repurchased by Americans have been refused a register as American vessels; yet those interested in navigation and commerce have at times being the strongest opponents of protection to American manufactures.

I ought to apologize for having been so prolix; but it is difficult to enumerate all the benefits that have resulted from protection to the wealth of the country, and to the comfort and prosperity of the population.

Very sincerely yours,

SAMUEL BATCHELDER.

CAMBRIDGE, June 18, 1867.

July 1



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THE ANGORA GOAT:

ITS

ORIGIN, CULTURE AND PRODUCTS.

By JOHN L. HAYES,

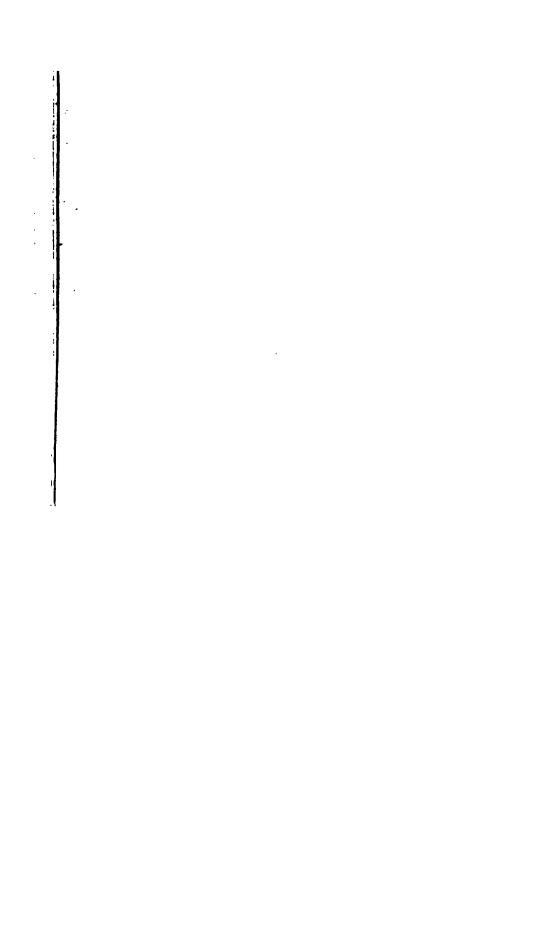
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THE Jardin des Plantes, the source and model of our Societies of Natural History, gave to the world not only Buffon and Cuvier, who, by their brilliant labors, won for the researches of the naturalist a place in the domain of science, before accorded only to studies of the imponderable elements, but two other scarcely less illustrious naturalists, whose labors were inspired by the purpose of applying their favorite science to increase the material resources of man. To this idea France owes the Merino sheep with which Daubenton endowed her, and the Imperial Society of Acclimatation, the creation of Geoffroy St. Hilaire, which aims to submit to practical study all the animals by whose acquisition the geographical zone of France can be advantageously augmented. Trusting that this Society may regard with favor the discussion of a subject akin to those which have received the attention of the great practical naturalists of France, I propose to submit a memoir upon the Angora Goat, the last acquisition which our agriculture and manufactures have received from the animal kingdom.

When we reflect that of the numerous species which compose the animal kingdom, forty-three only are at the command of man, and that the only lanigerous animal extensively appropriated in this country, besides its product of food, has furnished in a single year, from

domestic sources, seventy per cent. of the raw material for a manufacture valued at over one hundred and twenty millions of dollars, we must regard the acquisition of a new animal producing food and material for clothing, as an epoch in the industrial history of the country. It is the peculiar province of a Society like this to aid the development of this new national resource by shedding the fullest light upon the specific and geographical source of this animal, upon its habits, food and diseases, the uses of its products, and, above all, upon the laws which govern its reproduction; in a word, to make upon this subject natural history applied. As my object is less to present original matter than to diffuse the best authenticated information, corrected by your criticism, or sanctioned by your approval, a work rendered necessary by the errors abounding in agricultural reports and publications, I shall avail myself of the memoirs of M. Brandt, M. Tchihatcheff, M. Sacc, and M. Boulier, naturalists of high repute, and the very numerous notices scattered through the proceedings of the Imperial Society of Acclimatation.

The description of this animal, given in 1855, by M. Brandt, director of the Museum at St. Petersburg, and distinguished among the zoölogists of Europe, for his conscientious work and profound knowledge, is as follows:

"The magnificent example of the Angora goat, which the Museum of the Imperial Academy owes to M. Tchihatcheff, produces at first sight the general impression of a domestic goat, when attention is not directed to its thick and silky fleece, to its flat ears turned downwards, and its inconsiderable size. But it is precisely these traits which impress upon this animal a distinct seal, which give it the character of a peculiar race, whose origin is perhaps not the same as that of the domestic goat. The extremity of the snout, the cheeks, the nasal and frontal bone, as well as the ears, and lower part of the legs below the tarsal articulation, are covered with external hairs, which are shorter and thicker than those which cover the above mentioned parts in other species of goats. The forehead has soft hairs of less length, less applied to the skin, and, in part, curled. The hair of the beard, which is pointed and of moderate dimensions, being

six inches in length, is stiffer than the hair of the rest of the body but less so than that of the beard of the ordinary goat. The horns, of a greyish white tint, are longer than the head; at their lower part the interior marginal border turns inwards in such a manner that in this part they appear broad viewed in front, and narrow when seen exteriorly; at half their extension they direct themselves moderately backwards, and turn spirally outwards, so that their extremities, directed slightly upwards, are very much separated one from the other, and circumscribe a space gradually contracting itself. whole of the neck, as well as the trunk, is covered with long hairs, which, particularly upon the neck and lateral parts of the body, are twisted in spirals having the appearance of loosened ringlets, it being observed at the same time that they reunite themselves into rolled tufts, a disposition which is less marked in the anterior part of the neck. The hairs which exhibit the greatest length are situated above the forelegs, and are almost nine and one-half inches long. Those of the neck are a little shorter and are nine inches long, and those of the belly eight inches three lines. The length of the hair with which the lateral parts of the body, as well as the back, are covered, is only seven inches six lines, and that of the hair of the hind legs six inches to seven inches. Finally the slightly stiff hair of the tail is about four inches in length. The color of the robe of the animal is a pure white, here and there slightly inclining to yellow. The hoofs, somewhat small in proportion, are, like the horns, of a greyish white tint. The hair is without exception long, soft and fine; it is at once silky and greasy to the touch, and shows distinctly the brilliancy of silk."

M. Brandt observes that the hairs corresponding most to external hair have only a third, or at most, do not attain half the thickness of the external hair of the common goat; and that the external hair of the wild and domestic goats is not only closer, stiffer, and more massive, but has a more considerable torsion and a less even

¹ All the dimensions given by M. Brandt are in German measurement. One German feet is equal to 1.0200 English feet.

surface, that is to say, it is rougher and more scaly. He also remarks that "the walls of the hair of the Angora goat being thinner than those of the hair of the common goat, the substance contained in the fatty cellules cozes out more readily, which renders the hair of the Angora goat softer and more flexible, and gives it the lustre of silk."

M. Brandt omits to mention that the long ringlets cover the hair, properly called, which is rough and short and lies sparingly upon the skin.

The dimensions of the specimen examined by M. Brandt are given by him as follows:¹

in.	L
4	2
11	9
5	1
2	5
1	9
6	0
2	0
6	6
2	1
9	9
2	1
9	9
2	4
2	2
	11 5 2 1 6 2 6 2 9 2 9 2 2

The point of inquiry most strictly pertinent to the objects of this Society and one at the same time eminently practical, as indicating the laws which govern the reproduction of this animal, thus illustrating the relations of pure science with utilitarian ends, is the determination of the specific source of the Angora goat.

The popular opinion as to the origin of this species is founded upon the authority of Cuvier, who mentions but three species of the genus Capra—Capra agragus, Capra ibex, Capra caucasica. He says,

¹ Bulletin de la Société Impériale d' Acolimatation. T. 11., pp. 816-18.

"Capra ægragus appears to be the stock of all the varieties of domestic goat;" adding that they vary infinitely in size and color, in the length and fineness of the hair, in the size of the horns, and even in the number; the Angora goats of Cappadocia having the largest and most silky hair.

The more recent researches of zoologists have greatly developed the knowledge of this genus. Instead of three only there are now recognized nine species of wild goats, which are divided into two groups based upon the form of the horns:—

1. Group with horns flat in front, having a horizontal triangular section, and furnished with large transversal knots.

Capra ibex.
Capra hispanica.
Capra pyranaica.
Capra caucasica.
Capra sibirica.
Capra Walei.
Capra Beden.

2. Group with horns compressed and carinated in front.

Capra Falconeri. Capra sagragus.³

NOTE. - THE CASHMERE GOAT. The only goat beside the Angora which is strictly lanigerous is the Cashmere or Thibetian goat, which abounds in Central Asia, but whose origin is still obscure; although it has, according to Brandt, affinities with the Angora race. The size of the Cashmere goat is quite large; the horns are flattened, straight and black, and slightly divergent at the extremities. The ears are large, flat, and pendant. The primary hair, which is long, silky and lustrous, is divided upon the back, and falls down upon the flanks in wavy masses. Beneath this hair there is developed in the autumn a short and exceedingly fine wool, from which the famous Cashmere shawls are fabricated. The enormous prices of these shawls when extensively introduced into France at the commencement of the present century, as high as ten or twelve thousand france, stimulated the French fabricants to emulate the Indian tissues. The first yarns from Cashmere wool were spun in 1815, and the high numbers were worth eight dollars per pound. The peculiar Indian texture called "Espouline" was perfectly achieved; and the success in this manufacture was hailed as the most brilliant triumph of the textile industry of France. Under the patronage of Monsieur, afterwards Charles X., in 1819 a great number of these goats were imported from Thibet, as many as four hundred being introduced by one manufacturer, Baron Ternaux, and much enthusiasm was excited in their culture-Experience, however, proved that these goats yielded but very little milk, and

¹ Animal Kingdom, McMurtrie's Translation. Vol. 1., p. 198.

² Essai sur les chèvres par M. Sacc. Bulletin supr. cit., T. 111., p. 519, 561, T. IV., p. 8. Giebel.

The so-called goat of the Rocky Mountains is removed by Professor Baird from the genus Capra, where it was formerly placed by him under the designation of Capra Americana, Mountain goat. He says in the description of Aplocerus montanus, contained in his Report of the Zoölogy of the Pacific Railroad routes, "The figures and description of the skull and other bones of this species by Dr. Richardson, show very clearly that the affinities are much more with the antelopes than with the goats or sheep. In fact, none of the more modern systematic writers place it in the genus Capra, or, indeed, in the ovine group. The mere general resemblance, externally, to a goat is a matter of little consequence; indeed, its body is much more like that of a merino sheep. The soft, silvery, under hairs are very different from those of a goat, as well as the jet black horns, which are without any ridges, and smooth and highly polished at the extremities."

The more recent investigations have shown that the animals re-

that the raw wool or down produced from an individual never exceeded one hundred and eighty grammes, usually much less, which it was very difficult $\boldsymbol{\omega}$ separate from the coarse hairs, "yarre," and yielded not more than twenty-five per cent. of material which could be woven. The manufacturers also discovered, although they had overcome all the mechanical difficulties of fabrication, that the raw material, expensive as it was, formed not more than one-tenth of the cost of a shawl; that the Indian weaver worked for one-fifth the wages of a French workman, and that the ladies of fashion would pay double price for an Indian shawl, inferior in color, design and texture to the French fabric. The manufacture, which employed four thousand workmen in 1834, began to decline in 1840; and, although an occasional fabric may still be made, the manufacture has now ceased as a regular industry. The demand for the wool ceasing, the Cashmere goats became absorbed in the common race; and there is at present but a single flock of pure blood in Europe, the one preserved in the remarkable collection of domestic animals possessed by the King of Wurtemburg. There is reason to believe that the culture of the Cashmere goat will never be revived in Europe as a matter of profit, since a perfect substitute for the Cashmere down is found in the silky fleece of the new Mauchamps sheep, which is declared to be fully as brilliant and fully as soft as the product of the Cashmere goat, while it costs less as a raw material, and requires less manipulation to be transformed into yarn. (Sacc, sur les chèvres. Bulletin supr. cit., T. IV., p. 49. Industrie des châles. Travaux de la Commission Français, p. 10. Berneville Industrie des laines Peignées, p. 161.)

¹ Vol. vII., p. 672.

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that the Angora goat more nearly resembles another wild species lately discovered. This species, the Capra Falconeri, is found upon all the mountains of Little Thibet, and upon the high mountains situated between the Indus, the Badukshan and the Indo Kusch. It resembles greatly the domestic goat, from which it differs principally in its magnificent horns, which, near together at the base, are at first arched backwards, and then turn in a spiral inwards, and then over again outwards. They are strongly compressed, triangular and free from knots; their internal face, at first plane, is rounded higher up, whilst their external face is everywhere convex. Although there does not appear to be a development of fleece in this wild species corresponding to that of the Angora goat, M. Sacc, professor in the faculty of sciences at Neuchatel, who has made a special study of the goats, does not hesitate to declare, that "all the characters of this species seem to indicate that it is the source of the beautiful and precious Angora goat whose horns are spirally turned like those of Falconer's goat." M. Brandt intimates that the domestication of other wild species than C. agragus and perhaps the C. Falconeri had produced the Angora goat. Geoffroy St. Hilaire, the highest authority upon the origin of domestic animals, refers to the opinions of M. Secc and M. Brandt without dissent, thus: "he (M. Brandt) is led especially to see in the Angora goat, produced, according to Pallas, by the cross of the sheep with the goat, an issue of the Capra Falconeri; this opinion is also admitted by our learned confrere, M. Sacc."1

The hypothesis that the Angora goat is descended from Falconer's goat is rendered probable by the diffusion of the former around the mountains of Thibet, where Falconer's goat abounds, and even beyond the central plains of Asia from Armenia to Chinese Tartary, where its wool is manufactured, or exported in a natural state by the port of Shanghae. Angora wool, or mohair, was exhibited at the London Exhibition of 1862 among the Russian products, as proceeding from the country of the Kalmucks of the Don, situated between the

¹ Sur les origines des animaux domestiques. Bulletin supr. cit., T. v1., p. 808.

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Coming down to the Greek authors,—Homer and Hesiod, though frequently mentioning the goat as a domestic animal, make no allusion to any particular race. Ælian, referring to the goats of Lycia and the practice of shearing them like sheep, says that the wool is used for cords and cables. Appian mentions the stuffs known under the name of $K\iota\lambda i \times i \times i$ from Cilicia, the ancient name of the country in which Angora is situated, as a means of protection against projectiles; implying that the tissues of the goats of Cilicia were not distinguished for their fineness. Virgil gives the wool of the goat no other destination than to serve for the necessities of the camp and for the use of poor sailors:—

"Usum in castrorum et miseris velamina nautis."

Columella, the great writer on Roman agriculture, quotes this line of Virgil as applicable to the covering of goats, and while tracing the qualities which a perfect animal should possess, excludes all resemblance to the Angora goat by demanding that the hair should be black. Strabo, born in the town of Amasia, very near the present domain of the Angora goat, makes no mention of goats of that country distinguished for their fleeces, although he remarks upon the different races of fine wooled sheep found in many places in Asia Minor. whom I am following observes that the most careful research among the Byzantine writers, after the Roman possessions became the patrimony of a barbarous people, has not afforded the least indication of a fine and white wooled goat. It was not until the year 1555, that the Angora goat was distinctly made known through the Father Belon, who had travelled in Asia Minor, by a brief but sufficiently characteristic description. The silence of the classic authors in respect to any goat with fine and white fleece would seem to place it beyond doubt that the progenitors of this animal were introduced into Asia Minor at a comparatively recent period, when the country was invaded by barbarous and pastoral races, either Turks or Arabs. M. Tchihatcheff observes that the Arabs have never formed stable establishments in Asia Minor, while the Turkish race is the only one among the modern invaders of that country which came in search of a per-

manent home and has preferred it unto this day. He shows that two branches of the Turkish race, the Suldjeks and the Oghus, successively installed themselves in Asia Minor in the eleventh and thirteenth centuries, taking possession of the precise region in which Angora is included, and which their descendants still occupy. mediately previous to their immigration they had occupied the vast plains of Khorassan and Bokara, and still more anciently, according to the most celebrated orientalists and geographers, the country on the southern borders of Siberia and the mountains of the Altai chain. It appears thus to be not improbable that a race of animals, originating in Central Asia, whose representative still exists in the Capra Falconeri, should have been carried by the migration of pastoral tribes to the region in which they are now found in the modified form of the Angora goat. This hypothesis is supported by the statement of the President de la Tour d'Aigues, probably derived from the Turkish shepherds who accompanied the flock introduced by him into Europe in 1787, that "there is a constant tradition that the goats of Angora did not originate in that country, but were derived from Central Asia." 1

Although the origin of the Angora goat from Falconer's goat is not demonstrated by proofs as positive as those which support the derivation of the common goat from Capra ægragus, they are not less positive than those which formerly led all naturalists to attribute the paternity of the common goat to that species. The absolute knowledge of the progenitor of the Angora goat is of less practical importance than the demonstration of a specific difference between the two races. That the Angora goat constitutes a particular race; and is not due to the same origin as the common goat, seems established by the following considerations:—

1. There is an essential difference in the horns of the two races, those of the Angora race being twisted spirally, a configuration wholly wanting in the common race, the form of the horns being recognized by modern systematic writers as the basis of the classification of the

¹ Sacc, Essai sur les Chevres. Bulletin supr. cit., T. 1v., p. 6.

family Cavicornia, or ruminants with horns permanent, hollow and enclosing a piece of the frontal bone.

- 2. The mammillary organs are hemispherical, while they are elongated in the common species.
- 8. The very long wooly hair hanging in corkscrew ringlets, fine, white and lustrous as silk, covering the short and harsh hair properly so called, which lies upon the skin, is in striking contrast with the short and coarser external hair of the common goat with its finer interior hair or down.
- 4. The cry, wholly different from that of the common goat, resembles that of sheep.
- 5. The milk is more fatty; the odor of the male less strong and disagreeable.
- 6. The Angora, unlike the common goat, is fattened as readily as the sheep, and the flesh is exceedingly palatable.
- 7. The specific difference is finally established by the character of the crosses, a point to be referred to hereafter with more detail.

The theory of the difference of species in these two races is not invalidated by the fertility of the products of their crosses; such fertility having been observed in the mixed offspring of the more widely separated species, the horse and the ass. In this case it is well established that the he mule can generate and the she mule produce, such cases occurring in Spain and Italy, and more frequently in the West Indies and New Holland. 1

The practical deduction to be drawn from the separation of the two species is thus clearly stated by M. Sacc. "There is then no utility in creating flocks of the Angora for crossing with the ordinary goat. We must limit ourselves to preserving the species in entire purity and devote ourselves to improving the race by itself as has been done with the justly celebrated merinos of Rambouillet." A teading object of this paper is to enforce the opinion of this sagacious and practical naturalist.

¹ Lyell's Principles of Geology. Vol. II., p. 423.

² Bull. supr. cit., T. v., p. 571.

Upon the introduction of the Angora goat into France in 1787, and more recently in 1855, the opinion was generally entertained that the principal benefit to be derived from the new race would result from the amelioration of the products of the common species. This opinion unfortunately prevails in this country. It is sanctioned by all the agricultural notices or essays which have been published respecting the new race, and is naturally fostered by importers and breeders to enhance the selling price of bucks.

One of the earliest papers descriptive of this species which appeared in this country was published in the Patent Office Agricultural Report for 1857,1 it being the abstract of a report upon the Cashmere goats, as they were called, in the possession of Mr. Richard Peters, of Atlanta, Georgia, written by the well-known naturalist, Dr. John This excellent naturalist, repeating Bachman, of Charleston, S. C. the views at that time generally entertained, says: "The varieties of goats are equally numerous and equally varied in different countries. They are all of one species, the varieties mixing and multiplying into each other ad infinitum. They all claim as their origin the common goat, Capra kircus, which it is admitted by nearly all reliable naturalists derives its parentage from the wild goat, Capra agragus, that still exists on the European Alps." After referring to the diversity of color, aspect and form, seen in the goats of Hindostan, Chinese Tartary and Thibet, he says, "in a word, they are all of one species, but under many varieties; breeds have become permanent, and some are infinitely more valuable than others." He gives the results of breeding the Angora with the common goat as shown in the flocks of Mr. Peters in the following language:-"Familiar as we have been through a long life, with the changes produced by crosses among varieties of domestic animals and poultry, there is one trait in these goats which is more strongly developed than in any other variety that we have ever known. We allude to the facility with which the young, of the cross between the male of the Asiatic goat and the female of the common goat assume all the characteristics of the former. It is exceedingly

difficult to change a breed that has become permanent, in any of our domestic varieties, whether it be that of horses, cattle, sheep or hogs, into another variety by aid of the male of the latter. tendency to run back into their original varieties. Hence the objection to mixed breeds. But in the progeny of these Asiatic and common goats, nine-tenths of them exhibit the strongest tendency to adopt the characteristics of the male, and to elevate themselves into the higher and nobler grade, as if ashamed of their coarse, dingy hair, and musky aromatics, and desirous of washing out the odorous perfume and putting on the white livery of the more respectable race." Speaking of the Angora goat, Mr. Israel S. Diehl, who has contributed a paper upon it of much research, and valuable for many original observations, says:1 "This goat, though described as the Capra Angorensis, is only an improved variety of the Capra kircus or common domestic goat." He refers to numerous State agricultural societies and scientific and practical men to show the value of the Angora goat and its fleece, "and the facility with which it can be crossed and bred with the common goat, by which a flock can be readily raised and increased," adding, "almost all the progeny exhibit the strongest tendencies to the higher and nobler grades by assimilating themselves to the male and putting on the white livery of the more respectable, honored, and valued race." These views, widely circulated through the Government agricultural reports, have been accepted without question, and the efforts of breeders in this country have been largely wasted in vain efforts to produce crosses which would have all the value of the pure race.

To judge of the value and feasibility of such attempts we must bear distinctly in view the precise economical result to be sought for. It is obviously, not primarily to obtain a breed of goats which shall be fit for the butcher. Neither is it to secure a breed which will furnish a merely tolerable fleece which would be simply a substitute for the wool of the sheep. The object is to appropriate a race of animals which

¹ Report of the Department of Agriculture for 1868, p. 216.

shall produce a textile material adapted for certain defined purposes in the arts as distinct as silk, noble Saxony wool, or sea island cotton; a material which is a substitute for nothing else known, and has originated its own fabrics. The introduction of a race which fails to give this peculiar fibre, would be no real acquisition, however amusing to the breeder, and interesting to the physiologist the experiments in crossing might be.¹

Laying aside the statements given in the agricultural reports, as of little value as testimony, because there is no matter in which even skillful flock breeders are so liable to be deceived, as in the character and adaptation of their fleeces, and because there is no evidence that the products of the crosses referred to have ever been subjected to the only conclusive test, that of spinning, let us consider the feasibility of producing the typical fleece of the Angora goat, by means of crosses, by reference to admitted physiological principles, and the results in analogous cases. The illustrious naturalist, M. de Quatrefages, who has recently discussed, in his lectures at the Museum d' Histoire naturelle, and in the Revue des Deux Mondes,2 the principles which govern the formation of races, remarks that "there is one law in crossing which is constantly verified; each of the two authors tends to transmit to the product at the same time all its qualities good or This tendency he admits is modified by the predominance in one or the other, of the power of transmissibility. "When this power is equal in the two parents the product will have an equal mixture of the qualities of the parents; there will be a predominance of the qualities of one where this power of transmissibility is unequal. The inequality of the power of transmissibility appears to

¹ The conviction is extending among intelligent wool growers in this country of the importance of preserving the varieties of woolly fibre, each in its own character, purity and excellence, and free from that "mongrel type which will do-for everything but is not desirable for anything." At a meeting of the Ohio Wool Growers Convention, January 7, 1867, "Mr. R. M. Montgomery moved that the true curse in breeding sheep is to keep breeds entirely distinct and to endeavor to produce the bet clothing of the best combing wools, which proposition was unanimously agreed to." U. S. Economist, January 25, 1888.

² Vide Revue des Deux Mondes, Decembre 15, 1800 to April 14, 1861.

be much greater when the races are nearest each other, for sometimes the crossing between such races gives a product which seems to belong entirely to one of the two."1 He observes that it follows from these principles that nothing could be more irrational than to take animals of the half blood as regenerators to ameliorate a race; for not possessing completely the qualities which we seek, and having preserved a part of the bad which we wish to shun, they transmit a mixture of one, and besides, as they are necessarily of a formation more recent than the race to be regenerated, it will be the last one which will impress itself, if not upon the first, at least upon successive generations. These views are confirmed by the recent observations of Professor Agassiz, in Brazil, on the effects of crosses of races of men. He observes that the principal result at which he has arrived from the study of the mixture of human races in the region of Brazil is that "races bear themselves towards each other as all distinct species; that is to say, that the hybrids which spring from the crossing of men of different races are always a mixture of the two primitive types and never the simple reproduction of the characters of one or the other progenitor. It is also remarked by the same high authority, that, "however naturalists may differ respecting the origin of species, there is at least one point in which they agree, namely, that the offspring from two so-called different species is a being intermediate between them, showing the peculiar features of both parents, but resembling neither so closely as to be mistaken for a pure representative of the one or other.3

The views of the eminent physiologists above quoted give no support to the popular fallacy into which Dr. Bachman and Mr. Diehl seem to have fallen, that the male animal possesses the greater power of transmitting blood to his progeny. Dr. Randall in the chapter upon the principles of breeding in his "Practical Shepherd," while admitting that the ram much oftenest gives the leading characteristics

¹ Amelioration de l'espécé chevaline, Bull. supr. cit., T. VIII, 1961, p. 257.

^{*} A Journey in Brazil, by Professor and Mrs. L. Agassiz. pp. 296 and 338.

of form, attributes the greater power of the ram to the superiority of blood and superiority of individual vigor, as the ram is generally "higher bred" than the ewes, even in full blood flocks.

If it be true as a physiological principle that the parents in widely separated races tend equally to transmit all their qualities, what hope is there of obtaining a valuable lanigerous animal from the crosses of goats so widely separated as to belong to different species; especially when the heavy coating of one is absolutely worthless, and nothing short of the peculiar qualities found in the other is worth seeking All analogy teaches that it is vain to expect to form a permanent race of any value from the crosses of such widely separated races. Dr. Randall declares that "all attempts to form permanent intermediate varieties of value by crosses between the merino and any family of the mutton sheep with the view of combining the special excellencies of each have ended in utter failure." The German breeders say that it is impossible to transform, by crossing, the common sheep into merinos. Even after nine generations the common type reappears as soon as the use of merino rams of the pure blood has ceased.2 It is for this reason that the Germans refuse to the highest bred grade any other designation than improved half breeds.4

The constant use of regenerators of pure blooded Angoras, if they could be procured, which would soon be impossible, from domestic sources, if the system of crossing should be persisted in, would be of little avail. In the Asiatic goat we have a perfect standard, as in the Arabian horse. Mr. Youatt says of the English races of the horse descended from the Godolphin Arabian, or the Darley Arabian and the blood mares of Charles I., "where one drop of common blood has mingled with the pure stream, it has been immediately detected in the inferiority of form and deficiency of bottom." So, we may infer,

¹ pp. 110, 111.

^{*}The Practical Shepherd. p. 125.

⁸Secc. Bull. supr. cit., T. v., p. 571.

⁴ Practical Shepherd. p. 127.

⁴ Youatt on the Horse.

will a drop of blood of the common goat detract from the lustre and fineness of fibre found in the pure Asiatle race.

The elaborate article of Mr. Fleischman on German fine wool husbandry1 gives the results of constantly regenerating by the pure merino ram, the cross from the pure merino and common country sheep. At the fourth generation the fleece consists of 25 per cent. prima, 50 per cent. secunda, and 25 per cent. tertia wool. The nature of the wool is still coarse. There are about eighteen thousand wool hairs in a square inch. In the tenth generation the fine wool predominates. A fleece yields from 60 to 70 per cent. prima, 20 to 25 per cent. secunda, and 10 to 15 per cent. tertia wool. In the twentieth generation the fleece, by regular crossing and careful management, has 20 per cent. electa, 50 per cent. prima, 20 per cent. secunda and 10 per cent. tertia wool. There will yet be sometimes found stickel or coarse hair. At this period twenty-seven thousand wool hairs grow upon a square inch. Thus even at the twentieth generation, with the constant use of regenerators of the pure blood, the wool falls short of the fineness of the original or perfectly pure blooded animal, which has from forty thousand to forty-eight thousand wool hairs on a square inch. These facts show how slow is the approach to fineness of fibre even in crosses of animals descended from a remote though common ancestor.

Proceeding from analogy to direct evidence as to the results of breeding the race under consideration by means of crossing with the common species, no person in Europe has examined the Angora goat so thoroughly and for so long a period as M. de la Tour d'Aigues, President of the Royal Society of Agriculture of France, who in 1787 introduced some hundreds of these goats into Europe under the care of Turkish shepherds, and established them upon the low Alps where they greatly prospered. He affirms that even after the sixteenth generation the hair of the crosses obtained by crossing the Angora buck with females of the common goat remained hair and although it was clongated it could not be spun.² "This species is," he says, "constant

¹ Patent Office Report. 1847. p. 253.

³ Sacc. Bull, supr. cit., T. v., p. 570.

and although they procreate with our goats we can never hope to multiply them by crossing the races, because the vice of the mother is never effaced. If some individuals approach, more or less, the race of the sire, the hair will always be shorter and too coarse to be worked." The testimony of this official head of the agriculture of France is of the highest value, not only because his position led him to seek the utmost advantage from the introduction of a new race, but because an elaborate memoir published by him shows that he had made thorough experiments in spinning and manufacturing the products of his fleeces, for which he gives minute directions.

The observations of M. Brandt show that the thickness of the hair of the pure Angora goat is from a third to a half that of the common goat. This fineness of fibre is an essential spinning quality. The fibre of this species is always prepared and spun in the form of worsted of long wool, that is, the fibre is not carded or subjected to a process by which the fibres are placed in every possible direction in relation to each other, adhering by their serratures, but are drawn out by combing so that they may be straight and parallel, the ends of the fibre being covered in the process of spinning, so that the yarns are smooth and lustrous. The fibres being extremely slippery they will not adhere in spinning unless they have the requisite fineness to permit many parallel fibres to be united in a yarn of a given number. When the fibres are too large they require to be mixed with combing wool to "carry" the fibre, as it is technically called, which diminishes the lustre of the fabric. Manufacturers of worsted, who have had large experience in spinning the mohair of Asia and this country, inform me that the best mohair can be spun into yarns of the number forty-two, while others are with difficulty spun into yarns numbered from ten to sixteen. Fibre of the latter quality is of no more value than the most ordinary combing wool, except for a few exceptional purposes to be hereafter referred to. Lots of so-called Angora wool, doubtless the products of recent crosses, offered in the market the pres-

¹ Sacc. Bull. Supra. cit., T. 1v., p. 8.

ent season, could be used only for carpet filling, the lowest use of woolly fibre.

Although the facts and reasoning given above leave no doubt upon my own mind that the breeding from crossings of the common goat of this country should be abandoned, it is proper that I should state that hopes are still entertained in France of good results from breeding with the domestic goats of that country. M. Richard, of Cantal, in a report made in 1862 upon the animals deposited by the Society of Acclimatation at the farm of the Souliard in the Cantal, says: "Crosses produced from the Angora and the ordinary goats of Auvergne have given products, which at the second generation much resemble those of pure blood; and if the Society should continue its experiments upon this subject, I think it will obtain some happy results. Nevertheless, to settle the opinion upon this point, it would be useful to study this practical question wherever the Angora goats have been deposited."1 The most that can be made of the opinion so cautiously expressed is that the system of crossing is still regarded in France as a proper subject of experiment.

CULTURE IN THE REGION OF ANGORA.

The culture of this species in the country of its greatest development next demands attention. Ample information upon this point is furnished by scientific travellers. The celebrated academician Tournefort, the master in botany of the illustrious Linnseus, was the first to shed full light upon the ancient magnificence of Ancyra, the site of the present Angora, mentioned by Livy among the illustrious cities of the East. He refers to its most ancient people as having made even the Kings of Syria their tributaries, while its later inhabitants were the principal Galatians, whom the Apostle Paul honored with an epistle. He describes its monument to Augustus, the most splendid in all Asia, upon which was inscribed in pure Latin the life of the Emperor, its streets abounding with pillars and old marbles

¹ Bulletin supr. cit., T. 1x., p. 8.

mingled with porphyries and jaspers, its walls built up of ruins of architraves, bases and capitals, and its tombs covered with Greek and Latin inscriptions, all attesting that this was one of the centres of the Roman civilization, and making more significant the silence of contemporary authors before alluded to. But more interesting than the monuments of past splendors, is the mention first given with any detail by this traveller, of the contribution to modern civilization made by the barbarians from Central Asia. I transcribe his language:—

"They breed the finest goats in the world in the champaign of Angora. They are of a dazzling white, and their hair, which is fine as silk, naturally curled in locks of eight or nine inches long, is worked up into the finest stuffs, especially camlet. But they do not suffer these fleeces to be exported from this place because the people of the country gain their livelihood thereby. However it be these fine goats are to be seen only within four or five days' journey of Angora and Beibazar. Their young degenerate if they are carried further. The thread made of this goat's hair is sold for from four livres to twelve or fifteen livres the ocque. Some is sold for twenty and five and twenty crowns the ocque, but that is only made up into camlet for the use of the Sultan's seraglio. The workmen of Angora use this thread of goats' hair without any mixture, whereas at Brussels they are obliged to mix thread made of wool, for what reason I know not. In England they use up this hair in their periwigs, but it cannot be spun. All this country is dry and bare, except the orchards. The goats eat nothing except the young shoots of herbs, and perhaps it is this which, as Brusbequis observes, contributes to the consummation of the beauty of their fleece, which is lost when they change their climate and pasture." 1

Interesting statements in relation to the culture of this species at Angora are given by Capt. Conelly, an English traveller, in a paper read before the Asiatic Society, which I deem it unnecessary to repeat,

¹ A Voyage into the Levant. By M. Tournefort, Chief Botanist to the French King.

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as they are generally accessible in Mr. Southey's work on wool.1 The most recent information is that given by the Russian traveller before quoted, who devoted five years to the study of natural history in Asia Minor, and M. Boulier (Pharmacien Aide Major) in a report of a mission to Asia Minor presented to the French Minister of War.3 The region marked out by the former of these scientific travellers, as the peculiar domain of the Angora goat, is situated between 39° 20' and 41° 30' north latitude, and between 33° 20' and 35° longitude east of Paris, a surface of about 2350 metric leagues square, equivalent to about a forty-fourth part of the surface of the peninsula of Asia Minor, and about the same fraction of the area of France. This country is more or less mountainous and furrowed by deep valleys, its mean altitude being estimated at 1200 metres; while the more elevated masses are generally shaded with fine forests, the plateaus which form a large part of the country, are very little wooded. The absence of trees, bushes and arborescent plants gives the country the aspect of immense steppes. This nudity permits the first heats of the spring to dry up the little humidity which the earth has acquired in winter. The climate is excessive, the winters being very cold, and the summers exceedingly hot. The country is covered with snow in winter, the rain and snow being very frequent, the thermometer in the neighborhood of Angora frequently descending to -12° -15° -18° of the centigrade thermometer, corresponding to 10.6°, 5° and zero Fahrenheit.

The cold season continues, however, only three or four months. During the rest of the year the temperature is very hot, particularly in the valleys, while the fine days continue almost without interruption; abundant pasturage is found for the white goats only after the frosts and snows, when the first warm rains revive the vegetation. This time is of short duration, and the stimulus given by a copious

¹ Southey on Colonial Wools. p. 822, et seq.

² Vide Considérations sur la chèvre d'Angora par M. P. de Tchihatcheff, Bufl. supr. cit., T. xi. p. 205. Sur la chèvre d'Angora. Par M. Boulier, Pharmacieu Aide Major. Bull. supr. cit., T. tv., p. 557.

and succulent nourishment is exerted wholly in developing the fleeces in length. The shearing, which takes place in April, is hardly concluded when the vegetation called forth by the warm spring is arrested, and receives no moisture from the dews, persons lying at night in the open air finding in the morning no humidity upon their garments. This dryness, however, gives to the vegetation which flourishes, the only aliment to flocks during summer, an aromatic character which makes it peculiarly digestible and stimulating.

The mineralogical character of the rocks which underlie the country is generally feldspathic, the trachytic and serpentine rocks abounding. No peculiar mineralogical elements appear to be essential to the successful culture of this species, as M. Boulier observes that there is not the least sign of degeneracy in the fleeces of flocks grown upon calcareous or gypseous soils. The localization of this species in certain districts within the general domain assigned to it, is quite remarkable, and appears to be mainly determined by the altitude of the country, the flocks of the pure race being rarely distributed upon the most elevated districts, in the deep valleys or the neighborhood of the forests. This localization is doubtless encouraged by the native proprietors, who unanimously assert that this goat cannot be transported from the place where it is born to a neighboring village without suffering a deterioration of fleece. Even the intelligent travellers above referred to seem to partake of this opinion. Direct observations, however, in Europe and elsewhere, have shown that this apparent deterioration is only the effect of age, and not due to a change of place and climate or food. The finest fleece is found upon animals a year old, which is worth eleven francs the kilogrammes; although somewhat less fine in the second year, it is quite good at the end of the fourth year, when it is worth six francs the kilogramme. At the end of the sixth year the fleece is positively bad, and at this period the animals are usually killed, their natural life being only nine or ten years.

All authors agree that these animals, although able to resist both heat and cold except immediately after shearing, when they are liable to be destroyed by moderate depression of temperature, cannot withstand much humidity, either in their pastures or folds. In a moist atmosphere they are especially subject to maladies of the respiratory organs, or a kind of pleuro-pneumonia. In severe winters, while the common goat of the country is unaffected, the mortality among the goats of the pure race is frightful. This is due largely to their confinement, when the temperature is 15° centigrade, in very bad stables completely closed and unventilated, and to their nourishment upon fodder imperfectly dried, a very little barley only being given when the snow falls. The delicacy and lymphatic temperament of the white Angoras, which seem to be inherent to this race, appear to be closely related to their color. Some physiologists see in the color and delicacy of this animal the evidence of an imperfect albinism. In the very interesting discussions of the Board of Agriculture of Massachusetts in 1867, many curious facts were stated, illustrating the relation of a white color in animals with certain diseases and deficiences; for instance, that white horses are subject to diseases to which black or red horses are not. Prof. Agassiz expressed the opinion that change of color in animals must be the result of some general change in the system, and if it is not shown in the eyes it will be shown in something else, the light color being a kind of bleaching of those darker tints which are connected with the qualities of the blood indicating a certain feebleness of the system." These views are peculiarly interesting when taken in connection with the facts stated by M. Boulier as to the manner in which the losses above referred to are repaired. The fact had already been stated by M. Tchihatcheff, that when the losses are very considerable, the people of the country repair them by crossing the Angora with the common goats, and that the purity of the race is regained in the third generation. This statement was regarded in France as conclusive as to the expediency of crossing with the common goats of France, until the statements which follow were published. M. Boulier shows that the goats referred to as common in Asia, are of the same species as those of the pure Angora race, from which they differ only in their color and size. The variety which is spread everywhere in Asia Minor upon

all soils and at all altitudes, is the black or Kurd race. The variety confined to the narrow limit is the white race. "The one and the other," he says, "have long fleeces. Their general forms resemble each other. The black goat is only of a size about a fifth larger than the white goat. The weight of the fleeces of the black race varies between three and four ocques (3 kil. 750 to 5 kil.). The hair, black, straight and without undulation, reaches a length of 0.27 m. . . . The length of the locks of the white race reach 0.25 m. and the weight of the best fleeces two ocques (2 kil. 500)." M. Boulier cites two examples to show that the introduction of the white female goats into the country where they have not previously existed is not regarded by the natives as the most simple and rapid means of acquiring the more precious race. "Seventy years ago, at Zchiftela Gentchibe Yallaci, the natives possessed no white goats. Since that period they have crossed the black female goats of the village with the buck of the white race, and at present there are not less than eight thousand goats of the latter race upon the territory of that district. We have examined the flocks, and the fleeces are in no respect inferior to any of those which we have seen elsewhere. It is now established in respect to these new generations that after three years of experience the newly crossed race has not degenerated; it is distinctly established, since for a long time the regenerators are taken from the flocks themselves. At Sidi Ghazi the crossing by the same procedure has been commenced within only six years. The flocks are magnificent." The effects of the crossing in the successive generations are thus detailed:-

- "1. The cross of a black female goat with a white buck will present a fleece marbled with a yellow color upon an impure white foundation. The flanks, the shoulders and the head will preserve more particularly the marks of the color of the mother; the fineness of the fleece will be sensibly ameliorated.
- "2. The cross of this first product with a white buck will cause all the dark tints to disappear. The fleece will become white. The shoulders and the flanks will be covered with wavy ringlets; but the

whole line of the back, and the forehead will remain furnished with coarse, straight hairs.

3. On coupling this new cross always with a buck of the pure race we shall obtain a greater fineness in the long ringlets of the flanks and shoulders; the dorso-lumbar portion of the vertebral column will no longer retain coarse hairs which will remain still on the upper part of the neck and forehead.

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- 4. A fourth cross, carried on with the same precautions as before, will fix a stamp of purity to the product, the coarse hairs will have disappeared on the forehead and neck.
- 5. The consecutive crossings will render more stable the modifications already formed, and already after the fifth generation the individuals will be able to reproduce as if they were of the pure blood."

An infallible proof of fineness not mentioned by M. Boulier is insisted upon by other writers, viz., the curling of the wool, which is observed upon the young individuals only when they are of the pure blood, so that all the young bucks are rejected from the flocks with the utmost care as not being of the pure race, whose wool is not curled.

It is not to be denied that further observations are greatly to be desired in confirmation of the observations of M. Boulier. They are, however, referred to by M. Sace as both "skillful and conscientious," and are relied upon by the latter naturalist as establishing the identity of the species of the black Kurd and white Angora race, and they are quoted with approbation by M. Bemis, principal veterinary surgeon of the army of Africa. This identity seems confirmed by the observations of M. Diehl, who has personally visited Angora. "There

¹ Bull, supr. cit., T. v., p. 168. The facts stated by M. Boulier may seem inconsistent with the views elsewhere presented in this article as to the slowness of improvement by crossing. The identity of species in the black and white race is not settled by this naturalist. The power of deviation within wide limits may be a characteristic of this species in domestication; and these facts, to use the language of Prof. Agassis in relation to deviations of species, may "only point out the range of flexibility in types which in their essence are invariable." A Journey in Brazil. p. 42.

is also a second, or other variety of Angora or shawl wool goat, besides those generally described. This goat has an unchanging outer cover of long coarse hair, between the roots of which comes in winter an undercoat of downy wool that is naturally thrown off in spring or is carefully combed out for use. A remarkably fine species of this breed exists throughout the area to which the white-haired goat is limited."

The number of goats of the white race grown in the district of Angora is estimated by M. Sacc and others at three hundred thousand, and the product in wool, called tiftik by the natives and mohair in England, at two million pounds. The English tables of Turkish exports make the product in 1867 a little over four million pounds. Formerly the wools of Angora were wholly spun or woven in place, and were exported in the form of yarns or camlets, of which the city of Angora sold in 1844, thirty-five thousand pieces to Europe. The exportation of the wool was prohibited through the same wise policy which enabled England by its monopoly of the combing wools to build up its stupendous worsted manufacture. Some twelve hundred looms were employed. The natives displayed great skill in making gloves, hosiery and camlets for exportation, and summer robes of great beauty for the Turkish grandees.1 The town flourished and the whole population was busy and happy in the pursuit of their beautiful industry. After the Greek revolution the Turkish Government was tempted by British influence to admit, free of duty, the products of European machinery and to permit the export of the raw tiftik. This fatal step was the death blow of the town of Angora. The whole product, with the exception of twenty thousand pounds only, still worked up at home, was exported to England. The looms employed were reduced from one thousand two hundred to not more than fifty; and the town, although having at its command the raw material for a most important and characteristic manufacture, offers in its sad decline another monument of the desolating influence of

¹ Southey on Colonial Wools.

that system which would make the raw material of every country tributary to the one great workshop of the world.

RESULTS OF EXPERIMENTS IN ACCLIMATION IN EUROPE AND THE UNITED STATES.

The attention of philanthropic agriculturists in Europe was drawn to this race in the last century. The first attempt to appropriate the race in Europe was made by the Spanish Government, which imported a flock in 1765, which has disappeared. Next followed the importation of the President Tour d'Aigues, who introduced some hundred upon the Low Alps in 1787. This experiment of acclimation appears to have been wholly successful, as this eminent agriculturist declares that although his flocks received no special care, they were constantly preserved in good health and accommodated themselves as well to the climate as the pasturage. "I can attest," be says, "that nothing is easier than to raise and nourish the species; they are led to the pastures with the sheep and are fed like them in winter." Towards the end of the last century Louis XVI. imported a flock of Angoras to Rambouilet, but this, as well as the flocks of Tour d'Aigues, disappeared in consequence of the revolution. best results were obtained in Spain from the importation of a flock of a hundred in 1830 by the King of Spain. M. Graells reports that this flock was transported to the mountains of the Escurial where he says: "I had occasion to see them for the first time in 1848, that is to say, eighteen years after their entry into Castile. At this time the flock was composed of two hundred individuals, almost all white. The males had a magnificent fleece. The shepherds told me that all the primitive individuals had disappeared, and that those which lived were born in the country, and that they could be regarded as naturalized to the climate, the food and other inherent conditions of the central region of Spain. At Huelva there is another flock of Angora goats, composed of a hundred head, and from the information I have obtained it prospers very well in the mountainous region of

that province." The above extract is instructive as showing the slowness with which this race is multiplied, the primitive flock having tripled only in eighteen years.

In 1854, the Imperial Society of Acclimatation of France resolved upon vigorous efforts to appropriate this race. In 1855, it was in possession of a flock of ninety-two head. This flock was subdivided and placed in different districts in France. But the success was far from encouraging. Many died, and those which survived gave fleeces which were far from satisfactory. In 1858, all the separate flocks were reunited and placed at Souliard in the mountainous and trachytic district of the Cantal. The animals rapidly recovered their health, and were increased without suffering any malady. fleeces were in an admirable condition, and were fabricated into velvets of such fineness and lustre that it was pronounced that "the wool of the Angora goat has been ameliorated in France." The increase of this flock was disastrously checked by the rigorous winter of 1859, and the rainy and damp summer which succeeded. "The abundant snows of the winter," says M. Richard, "prevented on the one hand the goats from issuing from their stable; the stabulation favored in them a predominance of the lymphatic system. other hand the showers and the incessant rains of the spring continued during the whole summer. The goats, always in a damp atmosphere, eating wet grass, contracted as well as the sheep an aqueous cachexy; a third of the animals succumbed from this malady. If energetic means had not been employed upon the first symptom of the invasion of the affection which was decimating the flock, it is very probable that few would have survived. The malady was arrested by a tonic and fortifying medication." The flock, reduced from ninety-two head in 1855 to seventy in 1862, was at the latter period in good health. 2

The experience in France, although by no means encouraging in all respects, is instructive as indicating the principal cause of the destruc-

¹ Rapport de M. Ramen de la Sagra. Bull. supr. cit., T. 1., p. 23.

³ Sur les animaux de la Société d'Acclimatation, Par M. Richard (du Cantal). T. Ix., p. 5.

climate of the flocks, exposure to a damp climate. The excessive climate of the middle and northern districts of this country, the cold winters and warm dry summers would seem to indicate these districts as most favorable to the acclimation of this species. Experience has fully confirmed what might have been assumed a priori. The first importation was made in 1849, by Dr. J. B. Davis, of eight Angora goats, two bucks and six females. The facts relative to subsequent importations and their results are given in the elaborate article of Mr. Diehl, which, being readily accessible in the widely circulated Agricultural Report of 1863, I need only briefly refer to. Mr. Diehl gives the results of his observations of most of the flocks, proceeding from some three hundred head imported from Angora, numbering, according to him, several thousand, and scattered mainly through the southwestern States, as follows:—

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"We have either personally visited and examined most of the localities and flocks (mentioned by him), seen or obtained animals or specimens of the wool, comparing them with what we saw abroad and the best specimens of wool to be obtained from abroad, or the best imported ones, and are well satisfied and thoroughly convinced that we have succeeded, and can continue to succeed, in raising this valuable wool-bearing animal, with its precious fleece, almost anywhere throughout our country where sheep will prosper, especially in the higher and colder localities,-producing an animal more hardy, with a heavy and more valuable fleece than the Angora or Cashmere itself in its own country. The specimens of wool in our possession are more silky and fleecy than the imported or original ones." M. Diehl gives extracts from original communications of practical stock raisers confirmatory of his statements. It is to be regretted that the value of these observations is diminished by the want of accurate discrimination between the products of the crosses and animals of pure blood.

APPLICATION OF PRODUCTS.

It has been already stated that mohair is not a substitute for wool but that it occupies its own place in the textile fabrics. It has the aspect, feel and lustre of silk without its suppleness. It differs materially from wool in the want of the felting quality, so that the stuffs made of it have the fibres distinctly separated and are always brilliant. They do not retain the dust or spots, and are thus particularly valuable for furniture goods. The fibre is dyed with great facility and is the only textile fibre which takes equally the dyes destined for all tissues. On account of the stiffness of the fibre it is rarely woven alone, that is, when used for the filling, the warp is usually of cotton, silk or wool, and the reverse. It is not desired for its softness in addition to silkiness, such qualities as are found in cashmere and Mauchamp wool, but for the elasticity, lustre, and durability of the fibre with sufficient fineness to enable it to be spun. Those who remember the fashions of thirty or forty years ago may call to mind the camlets so extensively used for cloaks and other outer garments, and will doubtless remember that some were distinguished for their peculiar lustre and durability, which was generally attributed to the presence of silk in the tissue. These camlets were woven from mohair. Its lustre and durability peculiarly fit this material for the manufacture of braids, buttons and bindings, which greatly outwear those of silk and wool. The qualities of lustre and elasticity particularly fit this material for its chief use, the manufacture of Utrecht velvets, commonly called furniture plush, the finest qualities of which are composed principally of mohair, the pile being formed of mohair warps which are cut in the same manner as silk warps in velvets. Upon passing the finger lightly over the surface of the best mohair plushes the rigidity and elasticity of the fibre will be distinctly perceived. The fibre springs back to its original uprightness when any pressure is removed. The best mohair plushes are almost indestructible. They have been in constant use on certain railroad cars in the country for over twenty years without wearing out. They are now sought by all the best railroads in the country

as the most enduring of all coverings, an unconscious tribute to the remarkable qualities of this fibre. The manufacture of Utrecht velvets at Amiens in France consumes five hundred thousand pounds of mohair, which is spun in England. Ten thousand workmen were employed in weaving these goods at Amiens in 1855, the product being principally sent to the United States. The mohair plushes are made of yarns from No. 26 to No. 70, the tissues made of the former number are worth four francs per metre and of the latter ten francs per metre, showing the importance of preserving the fineness of the fleece. A medium article is made extensively in Prussia, of yarns spun from an admixture of mohair with combing wool, but it is wanting in the evenness of surface and brilliant reflections or bloom of the French goods. Mohair yarn is employed largely in Paris, Nismes, Lyons and Germany for the manufacture of laces, which are substituted for the silk lace fabrics of Valenciennes and Chantilly. The shawls frequently spoken of as made of Angora wool, are of a lace texture and do not correspond to the cashmere or Indian shawls. The shawls known as llama shawls are made of mohair. I have seen one at Stewart's wholesale establishment valued at eighty dollars, weighing only two and one third ounces. Mohair is also largely consumed at Bradford in England in the fabrication of light summer dress goods. They are woven with warps of silk and cotton, principally the latter, and the development of this manufacture is due principally to the improvements in making fine cotton warps, the combination of wool with mohair not being found advantageous. These goods are distinguished by their lustre and by the rigidity of the fabric. All the mohair yarns used in Europe are spun in England, the English having broken down by temporary reduction of prices all attempts at spinning in France. Successful experiments in spinning and weaving Angora fabrics have been made in this country, as shown by the samples of yarns spun by Mr. Cameron and the dress goods spun and woven by Mr. Fay of the Lowell Manufacturing Company from Angora wool grown by Mr. Chenery at Belmont.

Before the demand of this material for dress goods and plushes,

mohair was largely used in Europe and this country for lastings for fine broadcloths, the lustrous surface acting as a frame in a picture to set off the goods. This use is now abandoned. Mohair is now extensively used to form the pile of certain styles of plushes used for ladies' cloakings, also for the pile of the best fabrics styled Astrakans. Narrow strips of the skin of the Angora with the fleece attached have been recently in fashion for trimmings, and great prices were obtained for a limited number of the pelts for this purpose. The skins with the fleeces attached will always bring high prices for foot rugs, on account of their peculiar lustre and the advantages they possess over those made of wool, in not being liable to felt.

Nearly all the raw mohair of commerce is at present consumed by a very few manufacturers in England, who first commenced spinning in 1835, at the suggestion of Mr. Southey, and soon excluded the Turkish yarns by the superiority and evenness of their yarns. The enormous works of Mr. Salt in England were erected in 1853, mainly for the manufacture of mohair and alpaca fabrics. The annual exports of mohair from Turkey as well as other instructive facts are given in the following letter from a leading wool and commercial house in New York, obtained at my request.

NEW YORK, December 7, 1867.

MESSRS. G. W. BOND & Co., Boston, -

Dear Sirs: — Agreeably with the request of your Mr. G. W. Bond, we beg herewith to hand you all the information we have regarding mohair or goats' wool.

Good mohair (Angora goat) is not known as an article of commerce anywhere but in Asia Minor. It is received from Asia Minor in bales varying from one hundred and fifty to two hundred pounds in weight, as most convenient, each fleece carefully rolled up and tightly packed. The exports from Turkey are as follows:—

1850				12,884 bales.
1860				11,902 "
1861				 16,592 "
1862				17,706 "
1868				14,812 "
1864				19,761 "
1865				27,641 "
1866				22,068 "

¹ Vide Janes's History of the Worsted Manufactures.



We have seen samples of goats' wool grown in S but they had degenerated, becoming coarser, an appearance which gives the staple most of its vs than a dozen houses in Europe; in fact, one firm the whole supply, and has agents in Turkey cho peculiar article; either everybody wants it, or r seems to be no steadiness in the trade; but the de for more than four months at a time. Large buytime, therefore stocks have accumulated to a co extent.

About two years ago the price was up to near fell, after long inaction, to about fifty to fifty-four or white Constantinople: but even at this price there value for second-class locky lots is always very u only a trifling portion of the exports, and will fetcl gold, per pound.

Fawn, a dark gray mohair, with long staple, is four cents gold to thirty cents currency. There mohair, but shorter and more cotted, that we think between twenty to thirty cents gold. The terms in the market are cash in one month less five per cactual and one pound draft per cwt.

I have ascertained from other sources the England of late years has been about double combing wools.

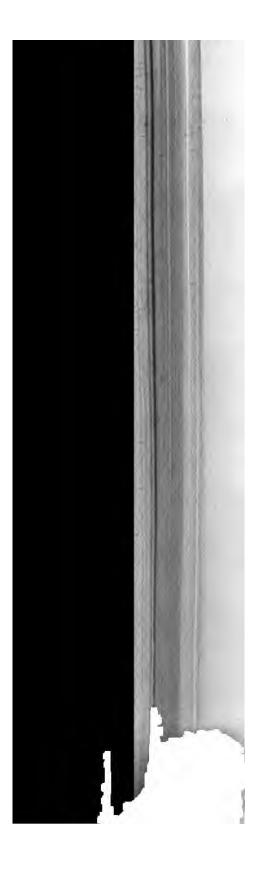
BECAPITULATION AND CON

Experience in Europe, confirmed by obse has demonstrated the practicability of the under favorable conditions of climate, wit fleeces. There are districts in this country perature and hygrometric conditions, corrresponded in Asia Minor and Europe as favorable to The Angora goat and the domestic goat of having descended from separate sources, the from the crosses of these two races is theoret demonstrated to be so by the best experience mal fibre desired for the textile arts is only the perfectly pure race, and perhaps in flocks

ard of the pure race by crosses of a perfectly pure buck with the black Asiatic goats of the same race. It is desirable that importations should be made of the black female Kurd goat of Asia Minor, for crossing with the pure white bucks. There is evidence of great weight in favor of good results from such cases.

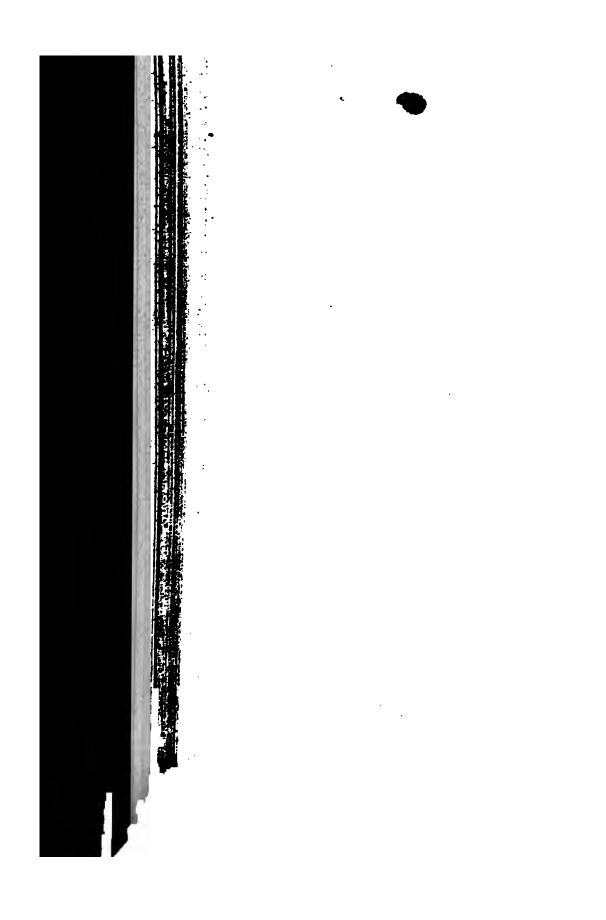
Systematic measures of acclimation must always be impeded by the eagerness of breeders for sale to obtain merchantable results. The appropriation of this race is of sufficient importance to deserve the earnest attention of the Government, as the best races of the merino sheep have been only secured through the persevering and disinterested efforts of governments in Europe. In the absence of any national society for acclimation in this country, a deficiency which ought not long to exist, the department of agriculture, under its present vigorous and intelligent head, offers the best means of securing the The cost of a single Rodman gun would secure a desired results. magnificent flock to serve for prolonged experiment and as a model to our agriculturists. Producers cannot expect to obtain remunerating prices for their fleeces until the manufacture of mohair fabrics is established in this country. It must be years before a sufficient supply is grown here to occupy a single mill. The fleeces of over ten thousand sheep are consumed every week in the single establishment of the Pacific Mills. It is probable that there will be a demand for all that can be grown for some time, for yarns for braids, and for Astrakhan cloakings which are being made in Rhode Island. The demand for animals of the pure race will increase without reference to the value of the fleeces. There are enough agriculturists of taste and wealth in this country who will readily pay large prices for these docile and beautiful animals simply as ornaments for their farms.

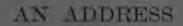
I am convinced that the greatest obstacle to the permanent acquisition of new resources from any department of nature is exaggerated expectations as to their value and facility of acquirement. Our impatient countrymen need to be reminded that real progress is the offspring not only of human effort but of time, and that of acclimation especially it may be said: Non solum humani ingenii sed temporis quoque filia est. There is encouragement however in the fact



that the fruits of decades or centuries in o here in years. In how brief a time has thi with all the animal wealth which Europ rapidly have we appropriated all the best the old world! Within half a century we sheep over all the prairies of the West, an acquired and perfected the cattle of the and even sent them back to ameliorate the The hope then is not vain that the precious westward we have traced from the remote is be fully secured for the western world.







CTOS THE

WOOL INDUSTRY OF THE UNITED STATES,

BEGRESSEE AT THE

EXHIBITION OF THE AMERICAN INSTITUTE

IN YOU

CITY OF NEW-YORK

DO

ERASTUS B. BIGELOW,

PRINCIPLES OF RATIONAL ASSOCIATION OF WOOL MANCHAGUERERS.

OCTOBBE 5, 1888.

NEW-YORK: 8: W. GREEN, PRINTER, 16 JACON SPICERY

TRUE.



AN ADDRESS

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UPON THE

WOOL INDUSTRY OF THE UNITED STATES,

DELIVERED AT THE

EXHIBITION OF THE AMERICAN INSTITUTE

IN THE

CITY OF NEW-YORK.

ERASTUS B. BIGELOW,

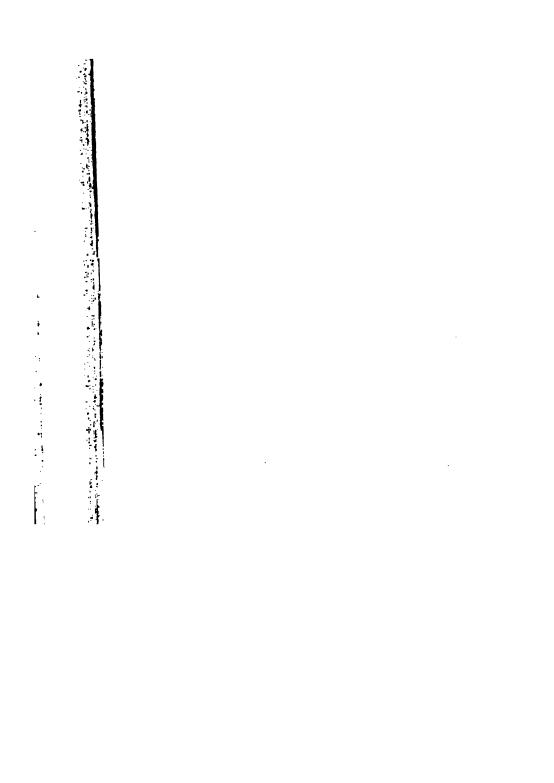
PRESIDENT OF NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

OCTOBER 5, 1869.

NEW-YORK:

S. W. GREEN, PRINTER, 18 JACOB STREET.

1869.



ADDRESS.

MAY I ask your attention for a few minutes, Ladies and Gentlemen, while I say a word in relation to a single department of this great Exposition? It is by the appointment and request of those who have the direction here, that I shall speak to you on the subject of wool and its manufactures. Among the numerous and varied products of art and industry which this occasion has brought together, you must have noticed that woolen fabrics hold a conspicuous place. The National Association of Wool Manufacturers, now about five years old, had already resolved on a special exhibition of their products; when, through the generous courtesy of the American Institute, a place was given them That old, honored, and useful institution desires, I am confident, no better proof that its kindness is fully appreciated, than that which our manufacturers have given in filling their allotted space with so many fine products of skillful industry.

Though the annual fairs of the Institute have long been celebrated, it may be doubted whether on any previous occasion there has been so rich and varied a display. As regards that part of it to which I now call your attention, I think no one can pass through the building and not

discover that in the number and variety of its contributions the woolen department far exceeds any other of the industrial interests here represented. This preeminence is due to the fact that these woolen contributions are the result of associated and systematic effort. Even this collection, large and full as it seems, gives but a partial idea of the wool manufacture in our country. Had all the other arts and industries which are to be seen on this spacious floor labored to bring out their strength as successfully as we have labored, the Institute would have needed numerous rinks as vast as this.

This exhibition of American woolens is the first instance of any attempt in our country to bring before the public eye, in one great collection, the characteristic products of a single industry. We can, I trust, honestly say that it is prompted by a higher motive than that of ambitious display. In no other way can the progress, the extent, and the value of such an industry be so effectually shown. No statements or statistics can be so impressive and convincing as the visible evidence which is furnished by an exhibition like that now before you. It is the next best thing to actually visiting the manufactories from which these fabrics come. Could you pass through the great establishments so honorably represented here, and look on their busy wheels and cards, and spindles, and looms—their myriads of thrifty, happy working men and women, the huge masses of raw material which they work up, and the countless car-loads of finished fabrics which daily leave the mills,

you would need no argument to assure you that the woolen industry of the country is second to no other, whether individually or nationally considered.

The annual value of our wool manufactures, and of those manufactures in which wool is a component part, is not less than \$175,000,000. Of these goods more than four fifths are made from American wools. The coarse carpet-wools, which are not grown here at all, the worsted combing-wools, and the fine clothing-wools, which are grown by us only in limited quantities, go to make up the rest.

In relation to the articles now brought out under the direction of the National Association, it is only proper to state that none of them were made specially for this occasion, or appear as candidates for prize awards. They are the usual products of the mills, such as are got up for the general market, and they are here not for individual gain or glorification, but rather to show the quality and the variety of our wool fabrics, and the extent to which they supply, or can supply, the wants of the American The fine quality and the beautiful finish of many articles in this collection can not fail to arrest attention. Yet the real significance of the display is to be seen, not so much in this as in the wide range and diversified character of the fabrics, in their soundness, and their fitness for the uses intended, and in the low prices at which they can be furnished. For instance, in no market of the world can better cassimeres be found than some of those which are here exhibited. These meet the demands of one class in the community,

The above figures, it must be remembered, represent the foreign valuation as expressed in gold. In comparing the value of woolen goods imported with the estimated value of our home productions, we must add to that valuation the customs duties, the premium on gold, and the profits of the importer. With these all on, the value of sales in first hands is fully double the amount of foreign valuation. If now to \$175,000,000, the estimate of our domestic product, we add \$64,819,518 for the sales of imported woolens in first hands, the result is \$239,819,518. Thus it appears that our own manufactures amount in value to nearly three quarters of the whole.

Notwithstanding the unquestionable and the generally acknowledged excellence of our wool manufactures—a fact which this exhibition fully demonstrates —those manufactures still suffer, more or less, in the market, from prejudices and prepossessions which are alike ill-founded. A preference for fabrics of foreign origin has very naturally come down from the time, not very distant, when our domestic products were generally inferior. Of those who now habitually insist upon buying the foreign article, some are honestly ig-They are not aware of any improvement in American manufactures. With others, it is the merest aping of a senseless fashion. But the delusion could not be long kept up, were it not for the interest of the dealer to sustain it. It is easy for him to make a larger profit on the imported article, from the fact that its probable cost is not so generally known. In many

instances the temptation is so strong that truth, honesty, and patriotism make their appeal in vain. only are American productions systematically disparaged, but, in a multitude of instances, these very productions are labeled as French, English, or German. extent to which this imposition is carried is known only to those who are let into the secret. There are, probably, very few of us who have not thus been taken in. And, what I am inclined to regret as the most melancholy thing of all, is the unquestioned fact that some of the manufacturers themselves have consented to the deed. I suppose the process by which such a bargain is consummated to be somewhat as follows: A manufacturer, after much toil and outlay, is prepared to introduce a fabric not before made here. He finds the market, however, fully supplied with the foreign arti-Those who hold it give him no encouragement, for they know that the introduction of the domestic product must lessen their chance for high profits. tween him and the consumer (who must be reached somehow, or his enterprise fails) stands a class of men whose interest it is to sell foreign rather than domestic goods. The result is a compromise. Says the dealer to him, "I like your goods, but I can not sell them as American. Give them a foreign brand, confine the product of your mill to me, and I will take all that you produce." The poor manufacturer, seeing no alternative, closes the unhallowed bargain.

It will be strange if this exposition of our wool manufactures does nothing toward correcting those mis-

taken ideas in regard to the inferiority of American fabrics which are entertained by so many. It shows the great and respectable body of American manufacturers that there are those among them who have no need to sail under borrowed colors, and who, under any circumstances, would scorn the thought. It is a silent but eloquent rebuke to those dealers in such fabrics who, to promote their own selfish aims, are wont to decry and deride every thing that is homemade. And, finally, it appeals to the great class of consumers, and bids them be candid when they buy, even if they can not be patriotic.

It has been through a long series of difficulties and discouragements that our wool manufactures have attained to their present advanced condition. Not the least of these impediments has been a vacillating tariff. In this respect the policy of our government has been sometimes friendly, sometimes decidedly hostile. The tariff of 1846, which imposed upon wool a higher rate of duty than some of its manufactures paid, proved especially adverse. Under its baneful operation the growing of wool remained almost stationary, and many of the largest manufacturing companies became bankrupt.

From peculiar causes, not likely to occur again, there is considerable depression in the wool business at the present time. The scarcity of cotton which was caused by the war created an extraordinary demand for woolen fabrics, which came largely into use where cotton had been used before. The effect of this, and especially of

the immense demand for army clothing, was greatly to stimulate the growing and manufacturing of wool, not only here at home, but in all those countries where these industries are pursued. Under these impulses the wool-manufacturing ability of the country was increased with a rapidity and to an extent wholly unknown before. Cotton-mills were converted into woolen-mills, and new establishments sprang up as if by magic in many parts of the United States. And now we behold the natural—I think I may say the inevitable—result, namely, an amount of production which is largely ahead of the demand. Though the machinery in operation was no more than the imperative necessities of war required, it far exceeds the normal demand in time of peace.

The condition of our wool industry in 1868, as compared with the years 1850 and 1860, is shown by the following tabular statement:

Items. •	1850.	1860.	1968.	
Pounds of wool grown	POUNDS. 52,516,959	ротира. 60,511,343	POUNDS. 177,000,000	
Value of wool imported	,,	4,842,152		
Value of wool manufactures imported Value of domestic wool manufactures			,	

This statement shows conclusively that it is not by the influx of foreign goods that our market for wool and woolens is depressed, the value of imported woolens for 1868 being five and a half millions of dollars less than it was for 1860. Most evidently, the great cause of the present depression is excessive home production. In 1860, the annual value of our domestic wool manufactures was \$68,865,963. In 1868, it had risen to \$175,000,000, an increase in eight years of \$106,134,037. It is a pregnant and important fact that our statistic returns show similar results in regard to the growth of wool during the period under consideration. With a production that has increased in eight years one hundred and fifty per cent, while our population has advanced only thirty per cent, can we wonder that the market is depressed? The wonder, as it seems to me, is, that the business is not utterly prostrate.

It has often been asserted that the depressed condition of the wool industry is due to the present high tariff on wool and woolens. The facts and figures just adduced show how baseless this allegation is. That beneficent law, so far from having an injurious effect on this great national interest, may rather be said to have saved it from destruction. I have already referred to the agency of the cotton famine in stimulating elsewhere the growing and the manufacture of wool. led to over-production in other countries, as well as in our own. For several years past the stock of merino wools—those wools which chiefly compete with the American product—has been unprecedentedly large in the foreign market, and has sold at prices ruinously Had our own wool-growers not been defended against this outside surplus, by an increased duty, mil-



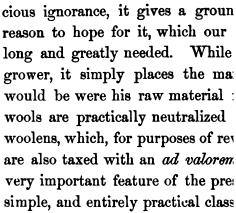
lions upon millions of their sheep the shambles, and their business ruined. It would be a satisfactio persons who ascribe to the tariff the of American wool, will just point would have been raised by the foreign surplus at a lower rate of or

So, too, of manufactures. government ceased to buy, and ha vast accumulation of army clothi market at rates that were extreme time, also, the surplus of foreign r at low prices, has helped to weigl In this crisis, what but the increa goods has saved our manufacturers throw? Will not some one show reduction of those duties, and the fl which would inevitably have delug market, could have helped the Until questions like these are sat by the opponent of the law, his tions must be regarded as of sma

Our wool industry being depres tion, its restoration to the normal and supply can alone bring relief. the wool manufacture, where the e marked, this desirable change has these branches are again reasonabl less some hasty and disastrous alter tariff laws, time and progress can i

same relief to all. The existing law has done good service in protecting the American producer against excessive and ruinous importations, at a time when the danger of such importation was great; and there is good reason to believe that it is well adapted to insure the continued development and the enduring prosperity of American industry. At the least, let us give it a fair trial. The unusual condition of the woolen interest and of the national currency have interfered with its legitimate working, and make it somewhat difficult to estimate its eligibility as a permanent policy. until the business and the monetary interests of the country rest once more upon a natural basis, shall we be fully prepared to decide the point. The consumer, certainly, has some reason to be satisfied with its results; for the prices of many woolen goods (reckoned in gold) are actually less than they were before the war.

It was, as you are aware, at a conference of leading manufacturers and growers of wool from all parts of the United States, and after full consideration and discussion, that the principle which underlies our present tariff on wools and woolens was unanimously adopted. It is, in fact, only a clearer and stronger expression of the idea on which the (so-called) "Morrill Tariff" of 1861 was partly based. It aims to give equal protection to him who raises and him who works up the raw material. It tends directly to reconcile great interests, which had been falsely regarded as antagonistic. And, best of all, by substituting united endeavor for hostile action, and a system well considered for capri-



Our wool manufacturers have be severe and unjust remark, under that the whole amount of the du operates as protection for them. 'case is very different, and ought t first place, the *specific* duty, so far as no protection. It is compensator the duty which they pay on their w rate, also, is neutralized, in part b materials used in manufacturing p taxes, from which their foreign riv actual protection which the tarif manufacturer (if we except a fer descriptions) is less than thirty I can not be regarded as excessive of

Considered as an element of na growing of wool is no less essent ture. Perhaps it should be regard portant, in view of the food which of the support which is given to as

this may be, it is certain that these two great industries are mutually related, and bound to one another by common interests. Neither of them can long prosper unless the other prospers also. Let our manufactures come to an end, and the grower, unable to compete with foreign wool-raisers, would have no market for his clip. The manufacturer, on the other hand, needs constantly a reliable supply of home-grown wool, not only to regulate the cost of his raw material, but also to insure soundness and uniformity in his fabrics.

Impartial justice and sound policy alike require that both of these important departments of the nation's industry should be kept, so far as legislation can thus keep them, on a footing of equality, and in such a position as will leave to their foreign rivals no advantage over them.

On the great questions of protection and free trade, it may be expected that I should say something on an occasion like this, and at a time when they are receiving more than usual attention in the discussions and the journals of the day. I believe that there can be no greater mistake than to suppose that the principles of either free trade or protection are universally applicable. The policy which would benefit one country might be highly injurious to another. Even in the same country, the condition of things may so change, in course of time, as to justify and require the abandonment of a system which had been highly beneficial. Eminently, therefore, may the tariff question be regarded as a practical question. All discussion of it on purely theoretic

grounds, and apart from facts, is worse than idle, for it tends to mislead.

Production being the source, and the only source, of national wealth, can it be doubted that our tariff legislation should aim at imparting to the labor of the country the highest degree of productive efficiency? For this we need a largely diversified industry, giving employment to persons of every class and condition, and calling into use all the additional power that machinery and science can bring to its aid. To adopt and enforce the system of those who are now clamoring for free trade, would be the very reverse of this. It would result in a tame surrender to other nations of all that we have accomplished in the way of manufacturing industry and improvement, and would remand us to those ruder descriptions of labor in which mechanical skill and science have, comparatively, but a limited application.

We ask protection for American manufactures, not certainly because our countrymen are less capable than their European rivals; for in intelligence, ingenuity, and aptness to learn they have no superiors. It is not because our natural advantages are less, nor from inability to acquire the requisite skill; for we have carried some manufactures to a perfection nowhere else attained. There are, however, certain conditions which affect, directly or indirectly, the cost of production, in respect of which the other manufacturing nations have a decided advantage over us. I refer to the rates of wages paid for labor, the rates of local taxation, and the rates of interest on capital. That these are things beyond

the control of our manufacturers, no one will deny. That the necessity of paying, in all these respects, much higher rates than their rivals have to pay, puts them at a serious disadvantage, seems equally certain. That there is one way, and only one, by which this damaging disparity can be counterbalanced, I think you will also allow to be perfectly clear.

Let us see now how this case stands. Mr. David A. Wells, Special Commissioner of Revenue, who has investigated this subject at home and abroad, thus states the difference between the rates of wages paid in the United States, and the rates which obtain in several other countries, (gold being taken as the standard in all cases.)

In the cotton manufacture, the excess of wages paid in the United States over the wages paid in Great Britain is 27 7-10 per cent; over Belgium, the excess is 48 per cent.

In the wool manufacture, the excess over Great. Britain is, in woolen-mills, 25 per cent.; in carpet and worsted mills, 58 per cent. Over France, Belgium, Prussia, and Austria, the average excess is 100 per cent.

In iron foundries and machinery building, the excess over British wages is 58 per cent.

In the manufacture of iron, the average weekly wages paid to puddlers (in gold) are \$16.24 in the United States; \$8.75 in England; \$8 in France; \$6 in Belgium; \$1.39 in Russia.

In reference to the inequality that exists in the rates of local taxation, the same statistician thus reports: "If we select, as an example, the cotton manufacture in Great Britain and the United States respectively, we find that in the former country the incidence of all local or other direct taxation extends only to the rental value of the buildings for the reception of machinery or the promotion of other details of the business; and does not, in any way, regard the value of the machinery which may be placed in such buildings, or the capital employed in its workings.

"On the other hand, in the United States the incidence of local taxation falls on every thing connected with the business of cotton manufacture that is accessible, namely, buildings, land, and machinery; and is, moreover, not unfrequently duplicated in the following manner: thus, factories are often built in this country under acts of incorporation in one State, while the stock is held or owned chiefly in other States. The municipality in which the factory is located taxes the buildings and machinery, and collects the tax of the corporation; the municipality, on the other hand, in which the stockholder resides, taxes the stock to him at its market value as personal property, and leaving the owner no remedy. In one instance (not an exceptional one) brought to the notice of the Commissioner, the aggregate of the local taxes imposed on a particular corporation in 1866 amounted to 4 9-10 per cent upon the capital invested, and in 1868 to over 4 per cent.

"But, vicious as this system is upon its face, its effect, especially in a national point of view, can not be realized until we take into consideration the fact that the capital required in the United States to build a cotton-mill is about double the amount required for a similar purpose in Great Britain. Four per cent, therefore, on the capital of a cotton-mill in the United States represents eight per cent on the same productive power in Great Britain, or a rate which is almost double the average rate of interest in the latter country."

The rate of interest on capital in the United States is, on an average, double its rate in England and in the other manufacturing countries of Europe. Capital is the basis of all business; and nowhere is it more essential to success than in the creation and conduct of manufacturing establishments. When it costs us twice

as much as it costs our foreign competitors, we set out at a disadvantage of one hundred per cent.

But for these inequalities of condition, our manufacturers could enter the race of competition with little fear of being distanced by any foreign rival. It is mainly upon this ground that they need and ask for protective duties. They seek no monopoly—no exclusive privilege. Give them an even chance in the game, and they will take care of themselves. Not until the cost of labor, taxation, and capital, through a gradual approximation, or by some great alteration here or there, shall have become nearly the same in Europe and America, will it be safe to abandon the present policy.

In view of such facts, you will readily perceive the mistake of those who adduce the rates of duties in other countries as examples and guides for us. conditions of wages, taxation, and capital in the manufacturing nations of the European continent (Russia excepted) are so nearly alike that high duties, as between themselves, would be inoperative. Under such duties their international trade would cease. France, Belgium, Austria, and Prussia the cost of manufacturing the leading articles is so nearly uniform that a duty of ten per cent protects them against each other as effectually as our higher rates defend us against them. The same, in effect, may be said of the Anglo-French Treaty, so loudly vaunted as a great step in the progress of liberal ideas. It can be proved that French producers under that arrangement receive more

protection against British industry than is afforded by our tariff to American manufacturers, in their sharp competition with France and England.

So long as our local taxation shall depend on the will and action of the several States; so long as the rates of wages and of interest in our country are kept up by the abundance of land and the demand for labor, neither skill nor assiduity on the part of our producers can remove the causes of that disparity which places them at so great disadvantage. The remedy, the only remedy, is in the hands of our national government. With that power it rests to say whether, in this great question of public and economic policy, their own people or foreigners shall be first considered. Let it be remembered, however, that equality is all we ask.

Congress has, we think, wisely entered on a protective system. To give it a fair trial, we need only confidence in its stability. A changing and uncertain legislation disheartens the producer, and is a constant check on enterprise. The talk about free trade would be harmless enough, but for the doubts and the fears of possible change which it inevitably excites. Weighed by its real merits, seen in its true light, it seems hardly possible that such a scheme should find favor with the American people. Unfortunately, as our history shows, and as we witness daily, other considerations, wholly irrelevant, are too often brought into the discussion of questions which are purely economic. What have party politics, what have benevolent efforts

at reform in morals or manners, to do with measures which relate directly and solely to the industrial interests and policy of the nation?

There is, undoubtedly, something plausible in the general idea, something attractive in the mere name of free trade. It assumes the tone of cosmopolitan goodwill, and professes to aim at perpetual harmony among Regarded abstractly, its theories are the nations. charming, and promise us "a consummation devoutly to be wished." But the question is, Can we confide in this promise? There is a class of amiable enthusiasts who believe in the possibility—as we all believe in the desirableness—of universal peace. Would the nation but listen to them, she would forthwith raze every fortification, freight her war-ships with corn and cotton, and melt her great guns into rails and plows. does she not listen? Why does she, why must she still fortify her harbors, replenish her arsenals, and keep up her navy? Because the arguments and exhortations of the Peace Society are founded on human nature not as it is, but as it should be. Because they strangely underrate the ever-present though sometimes dormant power of selfishness and passion. When "the wolf shall dwell" peaceably "with the lamb"—when the nations shall all see eye to eye—the pleasing dream of the non-resistant may become a blessed reality.

Of kindred origin and character, as it seems to me, is the illusive notion of free trade—very fair in theory, but wholly unsatisfactory in practice. Ignoring, as it were, the great law of self-interest, and the lesson of

all history, it goes upon the absurd assumption that henceforth the different communities of mankind will be governed, in their intercourse of trade and business, by the golden rule. It is a system which will probably work well in the millennium, but it is decidedly premature in an age like ours. Unless these views are fallacious, it is just as much the duty of a nation to protect its own industry against the injurious effects of foreign competition as it is to provide the means of defending its soil and its homes against the aggressions of open war.

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REMARKS

EFON THE PORTION OF THE REPORT OF THE SPECIAL COMMIS-SIONER OF THE REVENUE FOR THE YEAR 1809.

RELATING TO

WOOL AND WOOLLENS;

AUDRESSED TO

THE CHAIRMAN OF THE COMMITTEE OF WAYS AND MEANS OF THE HOUSE OF REPRESENTATIVES OF THE UNITED STATES.

EX

THE EXECUTIVE COMMUTTEE OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

JANUARY, 1870.

BOSTON: PRESS OF JOHN WILSON AND SON 1870.





REMARKS

UPON THE PORTION OF THE REPORT OF THE SPECIAL COMMIS-SIONER OF THE REVENUE FOR THE YEAR 1869,

RELATING TO

WOOL AND WOOLLENS; .

ADDRESSED TO

THE CHAIRMAN OF THE COMMITTEE OF WAYS AND MEANS
OF THE HOUSE OF REPRESENTATIVES OF
THE UNITED STATES.

BY

THE EXECUTIVE COMMITTEE OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS, 12.5.

JANUARY, 1870.

BOSTON:

PRESS OF JOHN WILSON AND SON

1870.



Hon. ROBERT C. SCHENCK.

Chairman of the Committee of Ways and Means of the House of Representatives of the United States.

SIR, — The official statements of an officer of the Government assuming to speak with authority often have an influence upon public opinion quite independent of the intrinsic correctness of his arguments and assumed facts, while their official sanction gives a circulation to such statements through the press which enhances the mischievousness of the errors which they may contain. These considerations impel the undersigned, members of the National Association of Wool Manufacturers, to notice the remarks made in his recent report by the Special Commissioner of the Revenue, in relation to the operation of the existing tariff on wool and woollens, — a measure instituted, to some extent, through the influence of the above-named association. The motives attributed by the Commissioner to the promoters and advocates of this measure relieve the undersigned from all embarrassment in defending their position, and from any delicacy which they might otherwise feel in criticising the communication of an official assumed to be uttered in the discharge of a public duty.

The undersigned are compelled to characterize the portion of the report above named relating to wool and manufactures of wool as abounding in grave errors and inconsistencies; as hostile in its whole tone and spirit to one of the most important industries of the country, or, at least, to the great mass of its representatives; as presenting arguments based upon facts which are either isolated or irrelevant; as abounding in that insidious form of the promulgation of error,—the suppression of facts which would have neutralized its statements; and as conemanating from the commission was written by another member, Mr. Colwell, no dissent is found on the part of the present Special Commissioner to the views of his associate. The report of the commission, it will be seen, shows that the movement now so stigmatized had no such selfish origin as is imputed, but was instigated by the commission itself as a measure of great national interest.

"The attention of the writer," says the report last cited, "as one of the Revenue Commission, has been turned to this important branch of industry (wool and woollens) since the commencement of his duties. Believing that the amount of internal revenue demanded by the state of our finances could not be realized without the vigorous and proper action of the leading classes, and that such continuous movement could not be maintained unless all the sources of domestic employment were opened and duly supported, the classes directly interested were invited to a full exchange of views. It is known that during the rise of the manufacture of wool in Great Britain a want of harmony existed between the wool-growers and woollen manufacturers which not a little retarded the progress of their industry, lessened their influence with the Government, and damaged their interests in other respects. A similar want of harmony and good intelligence was exercising a like injurious influence here.

"As nothing can be more certain than that the industrial interests of these two classes in the United States are substantially identical, it was a principal object to have the fullest possible interchange of opinion between them. Upon the first intimation of the wishes of the commission, the necessary conferences commenced, and continued for more than six months, without much pause, by conventions and separate and joint committees, in which the various interests of each class, and the united interests of both, were subjected to a scrutiny so patient, so intelligent, and so discriminating, that the utmost deference is due, and should be awarded, to conclusions so carefully prepared."

Such is the official declaration of the Revenue Commission, pronounced by one of the wisest and most respected of our

ted by the war. The increase of these wools within the last seven years has no parallel in any other period. In Australia, the progress has been from 32,000,000 lbs. in 1859, to 66,000,000 lbs. in 1866: an increase in seven years of 108 per cent. In the Cape of Good Hope, from 11,500,000 lbs. to 21,000,000 lbs.: an increase of 87 per cent. In La Plata, from 16,000,000 to 59,000,000 lbs.: an increase of 268 per "The lowering of the price of La Plata (mestiza) wools," says M. Aubée, "in the French reports of the Paris Exposition, within four years, may be set down, without exaggeration, at 40 per cent. It should have the effect of arresting the production, as the growers at present certainly suffer a loss." What person, unblinded by free-trade predilections, can doubt that the tariff which turned aside the tide of the wool surplus of the Southern Hemisphere from our shores, saved the merino-wool husbandry of this country from absolute destruction? In 1866, under the low duty on wool, practically three cents per pound, the imports into the United States from the two great competing countries, in fine-wool production. were 22,693 bales from Buenos Ayres, and 14,067 bales from the Cape of Good Hope. In 1868, after the wool tariff went into operation, the imports were reduced to 4604 bales from Buenos Ayres, and 1986 bales from the Cape of Good Hope.² Is it conceivable that a diminution of importation to the extent of 30,176 bales brought down the prices of our domestic wools, and this while the mills were still in full activity? It is needless to multiply arguments in proof of the saving influences of the present tariff upon our sheep husbandry, or to cite authorities from the united voices of the agricultural press, of the Commissioner of Agriculture, and of the wool-growing associations throughout the United States; for the views of the theorist whom we are combating are borne down by the practical judgment of the united agricultural opinion of the country.

3. The wool industry is asserted to be depressed in conse-

¹ M. Moll's report on Wools at Paris Exposition.

² Mr. Lynch's statistics, Bulletin of National Association of Wool Manufacturers, p. 84.

on wool have impaired our exports to the Cape of Good Hope and Australia, and our imports from those countries. With regard to the latter, as the imports have consisted principally of wool, the measure has had only the effect expected. With regard to the exports, it appears from a table exhibited that they have been reduced about \$300,000. The \$300,000 is put in competition with a great national industry, amounting annually to \$175,000,000. To preserve the former, the Commissioner would impair the latter.

5. On the other hand, the Commissioner, while maintaining that the tariff has increased the importation of foreign fabrics, asserts, as his final proposition, that the tariff has brought smuggling to a system. Which of these two propositions is true? Both cannot be; the same system cannot be calculated at the same time to increase importations and to diminish them. Waiving the fallacy of the Commissioner's reasoning, there is no pretence that smuggling prevails except upon the Canadian border, and its existence is not attributable to this special measure, as it prevails with respect to all dutiable goods of easy transportation. Both objections are too trivial to be entitled to any consideration in pronouncing upon a measure involving the life of a great national industry.

The formal charges against the existing wool and woollen tariff, contained in the preceding propositions, are followed by a discursive argument containing further statements and innuendoes, which the undersigned cannot permit to remain unanswered.

Following the remarks on exports, we find this extraordinary statement:—

"The wools of the United States are mainly merino clothing wools, which can be produced in any quantity, and at prices which defy foreign competition. Wool has been raised in Texas, during the last year, in large quantities, at an estimated cost of seven cents, gold, per pound; and it has readily commanded twenty-five cents per pound. It is furthermore to be noted that German Saxon wool, which during the last year has touched the lowest price almost of the century, could not now be imported, even in the absence of all duty,

on wool, was to check the ruinous competition of the foreign wools, which were being used as substitutes for the ordinary The American wools now take the place of the medium mestiza wools, formerly imported so largely. The great bulk of the wools excluded by the tariff are of this class. The substitution of the American wools has proved, moreover, highly advantageous. We find the published statement of a well-known manufacturer as follows: "In 1865 and 1866, we had a large amount of goods made of mestiza and other foreign wools, and were continually having claims made against us for imperfect goods. We abandoned the idea of making any more goods of mestiza, and from that time to this have never had a claim made upon us for a piece of feeble goods." Provision was made for the admission, at a mere revenue duty, of wools which it was admitted could not be profitably grown here. The protective duties were made to apply to the superfine wools and combing wools, as well as to the ordinary competing merino wools; to the superfine wools, because they had been grown here with profit and of unrivalled excellence, and to the combing wools, because upon public grounds there is no branch of sheep husbandry more desirable to nationalize. The result as to the latter has been most encouraging, and assures us of an ultimate domestic supply of the kinds of wool at present the most profitable to the manufacturers working them. The result as to the superfine wools, demanded to a comparatively limited extent in our manufacture, it is conceded has not been so encouraging. But the causes which have impeded this production are in operation all over the world, the culture of these wools being in a condition of decline in all countries producing merino wool. If manufacturers cannot afford to pay the price of imported Saxon wool of this character, even with the duty off, as the Commissioner implies, there is evidently a sufficient reason why such wools should not be grown here to any considerable extent.

The Commissioner attempts to fortify his positions by quoting the pretended admissions of one of the Commissioners at the Paris Exposition in his report upon wool and woollens, and does not heaitate to intimate that the ostensible support by the

material, it is not to be inferred that the undersigned would advocate the application to this country of the British system of protection by the free admission of raw materials which can be advantageously produced here, or that he would for a moment maintain that the woolgrower can obtain sufficient encouragement through the protection of The higher demands of American civilization the manufacturer. require that all our industries should be defended against the cheap capital and labor of competing nations. The labor which produces the wool cannot be distinguished from that which spins and weaves it. Considerations of national independence require us to seek to the utmost possible extent all our supplies from domestic sources. The woollen manufacturer has the best assurance of permanent prosperity when he can look to an uninterrupted supply of wool from sources not liable to be cut off by war, famine, pestilence, or political revolutions abroad. The American wool manufacturer, no less than the wool-grower, has the only market for his fabrics at home, and can have a profitable market only when all the industry of the country is profitably occupied. The system of political economy essential to the industrial prosperity of this country, demands that the claims of the wool-grower and manufacturer should be equally respected."

The experience in Great Britain and France is referred to by the Special Commissioner as establishing the policy of having free wools here. It is not observed, however, that there is no parallel in the circumstances of this and the foreign countries The chief production of England is combing referred to. wool, of which she has the monopoly more truly than we have Of course free merino wool, which she does not produce, is a boon to her manufacturers and no injury to her agriculture. France does grow merino wool, and that of great excellence, and notwithstanding the quoted report of M. Budrillard, the testimony from other sources is conclusive that the free admission of foreign wools is extinguishing the merino-wool husbandry of France. The wool-growers of Cote d'Or, the finest merino-wool district of the empire, in a petition addressed during the present year to the Emperor, say, "In the presence of an invasion which tends to substitute foreign wools for the French, the sale of the latter has become impossible." M.

tional demand for wool through the restoration of our Southern cotton supply, and the condition of a languishing manufacture in all the centres of woollen production in Europe. While taking exception to such unqualified statements of cause and effect the undersigned admit that enhanced duties on merchandise are not without effect on prices abroad. It is the protective argument that the foreign producer pays a part of the advanced duty on imports, and that the duty on imported wool and cloth is not all paid by the consumer here.

In support of his allegation that the wool-growers are not benefited by protective duties, the Commissioner refers to the high prices for wool received from 1858 to 1860, when wools costing less than twenty cents per pound were admitted free of duty. The fact cited is far from proving the position claimed, but is capable of another and more reasonable explanation. The period of high prices of wool referred to, occurred after the operation of the tariff of 1857 admitting certain classes of wool free of duty. Under the preceding tariff of 1846, the tax on wool was peculiarly oppressive to the manufacturer because not counterbalanced by an equivalent duty on goods. Under this system not only the wool manufacture, but sheep husbandry, The tariff of 1857, removing the wool duty and retaining that on goods, through the prospect which it opened of better times, gave an immediate stimulus to the wool manufacture, and created a demand for domestic wool greater than the supply, limited by the previous decline in sheep husbandry. Foreign imports could not come in at once to supply the demand. Hence the high prices until foreign commerce became adapted to the new state of things. With the foreign imports which poured in when the system of free importation came into full operation; viz., in the early part of 1861, the prices of wool declined. In February, 1859, fleece wools ranged from fortyeight to seventy-two cents. In February, 1861, still under the system of free imports, the prices ranged from thirty-five to fifty-two cents.1 The free importation as clearly diminished

Walter Brown's statement. "Bulletin of National Association of Wool Manufacturers," p. 85, vol. i.

than in 1860.¹ On the other hand, the books of a mill producing cloths more extensively and of greater variety than any other establishment in the country, and employing 2500 operatives, show an advance in wages in gold, from 1860 to September, 1869, of 37 per cent for female operatives, and 50 per cent for male operatives. These facts show conclusively that the protection to the woollen industry, if to no other, has been a boon to laborers and consumers.

The Commissioner concludes by asserting, in substance, that the most experienced woollen manufacturers of the country favor the removal of all the duties on foreign wools, and a general reduction of duties on manufactured woollens of every description to twenty-five per cent ad valorem. The undersigned do not doubt that many manufacturers, putting out of view other considerations of public policy, would be willing to have their raw material free of duty, provided sufficient protection were continued on their manufactured products; and that a net protection of 25 per cent, which would be actually [realized, as it cannot be under a system of ad valorem duties, would be satisfactory for all well-established branches of our industry. But the undersigned believe that it would be impossible to find ten

¹ The following statement of the comparative prices of standard fiannels furnished by leading manufacturers to Mr. Greeley, and published in his "Essays on Political Economy," is referred to as being unquestionably correct:—

Fabric.							PRICE IN 1859. (Gold.)	Price in 1869.* (Gold.)	Currency. Price in 1869.
Flannels, per yard: —									
A. and T. white							\$ 0.18	\$0.16	\$0.21
H. A. F. scarlet							.26	.28	.80
J. R. F. twilled scarlet							.80	.29	.87 į
B. twilled scarlet							.26	.25	.82
Double weight scarlet twilled							.271	.801	.40
F. & C							.86	.841	.44 į
Talbot R. # plain scarlet							.26	.25	.821
G. M. & Co., twilled scarlet .							.28	.20 <u>‡</u>	.27
E. S							.25	.28	.80
N. A. M							.25	.23	.30
Ballardvale 4-4 white, No. 1.	•						.75	.65}	.85
Ballardvale 4-4 white, No. 2.							.60	.681	.70
Ballardvale 4-4 white, No. 8.							.45	.401	.52
Ballardvale 4-4 white, No. 4.							.40	.841	.45
Ballardvale 4-4 white, No. 5.	•	•	•		•		.85	.82 į	.42

^{*} Equivalent in gold (gold at 180) October average.

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REVIEW

OF

ALCAN ON THE MANUFACTURE OF WOOL:

BEING A SUPPLEMENT TO

"THE FLEECE AND THE LOOM."

By JOHN L. HAYES.

FROM "THE BULLETIN OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS."

CAMBRIDGE:

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ALCAN ON THE MANUFACTURE OF WOOL.

THE positions occupied by M. Alcan, as Professor of Spinning and Weaving at the Conservatoire Impérial des Arts, &c., as Vice-President of the Society of Civil Engineers, and as a member of the juries of the Exposition of 1867, avouch for the authority with which he speaks upon the ancient and modern processes of manufacturing textile fabrics. Our associate, Mr. George W. Bond, who had the privilege of meeting M. Alcan at Paris just before the opening of the war, bears testimony to his great intelligence and the high appreciation in which he is held among French manufacturers. We have before us his work, Traité du Travail des Laines, or "Treatise on the Working of Wools," in two volumes, with an atlas of plates, a work which was published in 1866. We also have before us his work entitled "Studies in Relation to the Textile Arts at the Exposition of 1867."

The copy of the first-mentioned work, which we have on our table, is to us peculiarly interesting. Having failed to obtain a copy which we glanced over in one of our book-stores, we were so fortunate as to find one in the possession of a young woollen manufacturer, who is a type of what our manufacturers will be when the necessity of a thorough technical education is better appreciated. This young man, having graduated at the Scientific School of Harvard University, went through a regular course at the higher college, the mill. At the end of four years he demonstrated the advantages of a good technical education, by achieving for his employer, in Rhode Island, the successful and profitable manufacture of fine faced goods, in a mill which

had before been run at loss. The volumes before us bear evidence of the most careful reading, being annotated throughout with translations, obtained by use of the best art lexicons, of all the technical words not found in the common French dictionaries. We asked our friend to point out the portions of the work which he found most valuable, that we might translate them for the benefit of other manufacturers. "This," he said, "is impossible. I found the work exceedingly instructive, but more through what it suggested than by its definite instructions. The work must be studied as a whole to be of real utility." Our friend expressed what is found to be generally true of handbooks in any department of practical knowledge. Leplay, the great metallurgist, says that the whole art of metallurgy exists in the traditions of the workman. It cannot be found in the To learn any process of manual art, one must see the thing done. But technical books are invaluable as suggestors, and are most useful to those who know most. No practical experience would teach one a knowledge of the scaly exterior of a fibre of wool. This is only revealed by the microscope, and is learned from the books. "What I learned from the books about the peculiar structure of wool fibre," said a manufacturer to us, "led me to so modify certain machinery as to make a losing business a profitable one."

We do not attempt a review or criticism of the technical portions of M. Alcan's work, for the best of all reasons, our incompetency; neither can we reproduce, in the form of translations, any of his most instructive chapters, for the text is so fully illustrated by admirable drawings as to be unintelligible without them. We can only—and the best review could do scarcely more—gather a few leaves or cuttings which but imperfectly represent the tree. These in their degree may serve their purpose of suggesting. Perhaps they may do more. Mere cuttings, planted by careful hands in genial soil, may themselves become trees.

We are struck, in reading the historic introduction, — which, as a whole, is less interesting to us, because it is principally devoted to the ancient history of the French centres of the woollen manufacture, — with the view which the author takes of the high

development of the wool manufacture among the Hebrews. the chapter of Genesis concerning Judah and Tamar (xxxviii. 12, 15, 28), he sees the evidence of the shearing of the wool, its transformation into a veil or kind of capote sufficiently thick to conceal the features, and the application to the wool of scarlet The author, although a Frenchman, does not partake of the doubts of the English Bishop Colenso as to the authenticity of the book of Exodus, and he gleans some very instructive hints as to the progress of the wool manufacture from the 25th and 26th verses of the 36th chapter of this book. According to the version which he gives, differing somewhat from that which is familiar to us, "All the women that were industrious [wisehearted in our version | did spin with their hands, and brought that which they had spun, of blue, and of purple, and of scarlet, and of linen.* And all the women that were distinguished for their superior skill [whose heart stirred them up in wisdom, in our version] spun the hair of the goat."

From this passage is inferred the spinning of threads of all kinds and the finishing of woven fabrics. The passage indicates that the work of spinning devolved upon the women, as it was attributed in China to the wife of the Emperor Yao, in Egypt to Isis, in Greece to Minerva, and in Lydia to Arachne. The most curious inference is that the transformation of the hair of the goat required peculiar skill, the difficulty of spinning this fibre being equally observable at the present day.

The 8th verse in the 36th chapter of Exodus throws further light upon the progress of the textile arts, and is thus rendered: "The most skilful among the workmen [in our version, crery

According to Jahn's Biblical Archæology, the purple of the Hebrews was a medium hue between brown and pure red, but very bright. The color was obtained from the neck of a species of shell-fish, the murex, and was essentially the same as the Tyrian purple. The scarlet first mentioned in Genesis was a different color from the shell-fish purple, and was extracted from insects and their eggs found on a certain species of oak. The Persian word kermes is the origin of the French word carmoisin, and the words carmine and crimmen. The dark blue, or hyacinth, was extracted from the cuttle-fish, which bears in Hebrew the same name with color itself, and was highly esteemed, especially among the Assyrians.

The Hebrew word translated in our version linen is thought by learned commentators to mean cotton, this material being more highly esteemed by the ancient Orientals, the Egyptians for instance, than linen.

wise-hearted man among them that wrought] made the ten curtains of the tabernacle of twisted linen, and stuffs of blue, purple, and scarlet, artistically wrought with cherubims [with cherubims of cunning work, in our version]."

"It is impossible," says M. Alcan, "not to recognize in this description the ornamented stuffs designated later, and even at the present time, under the name of brocarts or brocatelles. The threads in vivid colors of scarlet and purple, for carpets and other usages, were evidently of wool or of goat's hair without any kind of fulling. The products here spoken of must have been of the same kind as those obtained in India and the East by processes which have been perpetual in these countries from the most remote period to this day. The specimens found in the Egyptian tombs enter, by the nature of their materials, the characters of their tissues, and by consequence the system of interlacement of the threads, in the class of ras (unnapped) stuffs. But we find nowhere in the Biblical writings evidence of the use of stuffs of wool and flax combined, this mixture having been expressly forbidden by Moses. ('Neither shall a garment mingled of linen and woollen come upon thee.') In the absence of religious motives, which no savant is competent to give us, are we not authorized to suppose that this was a technical disposition, analogous to those of which the rules of the ancient masters give so many examples; above all, when we reflect upon the little affinity between wool and flax, and the essential difference of their characters, which does not permit them to attain a product with homogeneous qualities? The state of advancement of the woollen industry among the Hebrews is besides confirmed by the importance attached by this people to the raising of sheep. Flocks formed their principal riches. They increased them from time to time by captures made in war. The defeat of the Moabites was worth to their conquerors 665,-000 ewes; that of the Hagarites gave 250,000 to the tribe of The king of the Moabites paid an annual contribution Judah. of 200,000 wool-bearing animals to Joram."

It is well known that among the Romans all their garments, with the exception of robes of fine flax, were made of wool. But it is quite new to us that there is reason to believe that the

beautiful tissues of Cashmere were in vogue among the Roman nations. The author cites the opinion of a learned academician, M. Gosselin, from the Histoire de l'Académie des Inscriptions et Belles-Lettres as follows:—

"The precious hair of the Cashmere goats appears to me to be that silky wool sought for with so much solicitude, and whose origin was so wholly unknown to them that they took it for a species of silk or cotton which was gathered from trees. The merchants carried this hair to Europe, when it had received only the coarsest manipulation; and the women, after having formed from it a new tissue, made it up into garments of extreme lightness.

"In this respect the industry of the Thibetians is not more advanced to-day than it was in the time of Pliny. They do not even now, according to Bernier, know how to make use of the beautiful hair of their goats; it is the inhabitants of Cashmere who obtain it from them to make the shawls so much valued in all Europe.

"We know nothing more beautiful than these stuffs; their extreme fineness renders them really transparent, as Pliny announces by these words: Tam multiplici opere, tam loginquo orbe petitur, ut in publico matrona transluceat (with such multiple labor, and from such far off-regions, is it sought, that the person of the matron may reveal itself in public). The high price which the Orientals pay for these stuffs, and which Europeans have paid for some years, explains how the Roman women were led to seek them for their finery, and to make of them entire garments. These are, I think, the serica vestes, whose usage Pliny complains of as an effect of unrestrained luxury: Aut veste serica versicolores, unquentes madidas. Hunc habet novissime exitum luxuria feminarum (or parti-colored in serican garments and dripping with ointments. To this end has the luxury of women lately reached.)"

According to our author, the ancients were familiar with the application of felting. They made felts exceeding an inch in thickness. They made use for this purpose of short wool, which they imbued with vinegar, and it became so hard as to resist the stroke of a sword. They were acquainted with the principle of fulling cloths, and made use of urine and a kind of clay. Their cloths were fulled by the feet in a tub in which were placed the cloth and fulling ingredients. The pictures of these fulling-tubs are preserved on the walls of Pompeii, and the same

"I said to him, 'Master Vincent, let us talk now of the making of woollen stuffs; this is the most important. I have just learned that the wools of the abbey farm arrived yesterday. Let us examine what operations they must undergo from the moment the sheep are sheared, up to the moment when they are placed upon the shoulders of the respectable dames of the convent. Let us look a moment. What do you do?' Vincent replied: 'I shall first carry the wools to the boilers to get out the grease and wash them; afterwards I shall spread them on the drier; as soon as they are dry, I shall beat them up, and I shall sort them: I shall divide them into two lots. On one side I shall put the long wools, suitable for the warp; on the other, the short wools, suitable for the filling. I shall afterwards oil the wools for the warp with hog's lard or butter, after which I shall comb them; and since now the king finds it best that we should card the wool for the filling, I shall card them. I shall have the first spun on the distaff, and the last only on the spinning-wheel.' - 'Master Vincent," said I, 'how many harnesses do you put on your loom?' -- 'Two, my brother,' he replied, 'for stuffs with a simple web like cloth, and three or four for twilled stuffs.' — 'How many yarns of warp do your cloths have?' — 'According to the kind or quality of the cloth; sometimes fourteen hundred, sometimes eighteen hundred.' - 'Your warp is sized, you stretch it upon the roller, you weave, you have woven all your pieces of cloth: what dressings do you give them?'-' I shall full them in the mill to cleanse and felt them. I shall give them a turn of the teazles, to draw out the hair from the wool. I shall full them again, and sometimes I shall sulphur them; sometimes also I shall shear them with the big shears. I shall give them a light turn of the teazles when they want my cloths all ready finished. I shall repeat these operations once or twice, and finally, if I don't want to leave my cloths in the white, I shall carry them to the dyer; if not, I shall press and colander them.'- 'How much length do you give to your piece of cloth?' - 'Fifteen ells.' - 'And width?' - 'Seven to eight quarters.' - 'If the weaver should give to his pieces of cloth less dimensions than these, what will happen then?' - 'He will have his hand cut off, and it will serve him right. So much the worse for the thieves; the honest weavers always want to keep their two hands to tell their beads.'

"Here are the prices which the good weaver gave me. Nobody knows better: a pound of wool, four sous; an ell of cloth, forty sous; an ell of blanket, six sous."



cylinder provided with a knife arranged in a helix, — more or less projecting, very sharp, and taking the form of a screw, with its threads very acute, turning tangentially in contact with a fixed knife, and the stuff upon which this knife rests. This invention, under the name of a "machine for shearing cloth, called a machine with helicoidal shears" was introduced into France in 1812 by Mr. George Bass of Boston, but did not come into use until the principle was adopted in 1817 by John Collier, a machine-builder in Paris. This invention is ranked among the most important of those which have brought the woollen manufacture to its present state, the saving effected in France in one year by its introduction being estimated at ten million frances.

M. Alcan, impressed with evidence of the fertility of invention in Leonardo da Vinci, given by his biographers, such as his construction of machines for making cylinders, files, saws, metallic presses, &c., among which is one for shearing cloth, bethought him that these inventions must have been described in the manuscript sheets which were brought from the libraries of Milan, at the end of the campaign in Egypt, by the First Consul, and deposited in a special library of the Institute. There he found the original manuscript sheets upon which the many inventions or machines had been sketched by Leonardo da Vinci, with a pen, the sketches being accompanied by notes, which, however, were illegible. He was so fortunate as to be able to re-unite all the sketches relating to the shearing of cloth. He reproduces them exactly in his atlas of plates, and explains in detail the operation of the machine. "It results from this description," he says, "that the shearing-machine of Leonardo da Vinci has an extraordinary analogy and almost identity with the first automatic shearers, called transversal, operating upon immovable cloth. The shearing-machines known in England under the name of Lewis, and in France under the name of Collier, their importer at the commencement of this century, will give an idea of the services rendered by this invention." Why was this invaluable invention forgotten, to be revived three cen-The obvious explanation is found in the turics afterwards?

principal manufacturing towns, to make known and propagate this modest and useful invention; the Republican administration granted a recompense of six thousand francs to him as an artist who had rendered services to the country. Finally, in 1816, the government gave him some further aid, and caused him to be admitted to the Asylum of the Incurables, where he died at the age of sixty-two years."

Our author is forced to recognize the service which the protective measures of Colbert rendered to the woollen industry of France. Since our great economist, Mr. Carey, has chosen the name of Colbert to symbolize the protective system, whatever relates to him is interesting to the disciples of that school. M. Alcan quotes from Pierre Clement's *Histoire de Colbert*, a curious explanation of the predilection of the great minister for the products of wool.

"The wool industry was that which profited most from the active solicitude of the minister, as if he had seen in cloth a material emblem of the future, since this industry would some day replace the garments of gold, silk, and velvet, as well as those of camlet and serge. In place of the nobility and the common people, between which were struggling the elements of a middle class, a long labor, sometimes latent and sometimes prosecuted in the open day, would put in motion the rising-up of the nation, ruled by the principle of civil equality. Industry, which models itself always upon the necessities of society, ought also to enter into new paths.

"France had possessed for a long time manufactures of common cloths, but it had received from Holland and England the finer cloths. It was with these, above all, that Colbert sought to endow the country. He consolidated the results obtained by Cadot at Sedan; he attracted Van Robais to France, and stimulated the establishment of the beautiful manufacture of Abbeville, which still flourished a long time after the reign of Louis XIV."

The ancedote related by Baron Ternaux illustrates the ingenious devices to which the great minister resorted to aid his favorite clients, the wool-workers.

"In spite of the pecuniary aid which had been granted to M. Cadot, the author of the manufacture of the cloth since called pagnons

(Sedan cloth), it was upon the point of succumbing under the weight of the sacrifices which were required to obtain workmen, and sustain competition with similar cloths manufactured at Leyden in Holland. The expenses of the war had exhausted the treasury; the manufacture had no one to look to for help, when Colbert induced Louis XIV. to have made a suit of light, striped green cloth, and to say, in presence of his court, when on point of mounting for the chase, that he thought the stuff very handsome. From that moment there became such a rage among the courtiers, and in imitation of them their courtiers, for dressing themselves in suits like the king's, that this variety of cloth, of which the minister had taken good care to have an ample provision manufactured, was sold at prices so high as to relieve the manufacture at Sedan, then at the point of extinction. This circumstance, moreover, gave birth to an establishment at Rheims, where the same fabric was manufactured for a long time under the name of silesia."

We would gladly closely follow our author in the review which he gives of the progress of the industry of wool from the end of the eighteenth century to the present period; but want of space for this compels us to use the material which he has furnished for a condensed sketch, which will bring in relief only the more salient points which mark that progress.

The adoption of automatic labor in the manufacture marks the commencement of the most important epoch in this industry. The first attempts at the mechanical spinning of wool date at nearly the same epoch in England and France. According to James, author of the "History of the Worsted Industry," the first machine for spinning wool was tried at Dolphin Holme in 1784, but the first success was not till 1791. Attempts had already been made in France. In 1780 the French government granted 3,000 livres to an Englishman named Price, established at Rouen, for the invention of a machine suitable for spinning combed wool. In 1783, a manufacturer of cloth near Chaleauroux announced that he had carded wool with success upon a cotton-carding machine. In the latter part of the last century, M. Simonis, of Vervier, a name still borne by the most eminent of the cloth manufacturers of Belgium, constructed a mill by the aid of which three persons could spin four hundred hanks of yarn per day. About this time the English had succeeded in spinning combed wool upon one of Arkwright's machines. A report of a jury of the French Exposition of 1806 contains a most instructive document as to the mechanical condition of the wool industry at that period. It is a complete list of the machines applicable to the cloth manufacture which were exhibited, and is as follows:—

- 1. A machine for opening, tended by a boy, doing the work of forty persons.
 - 2. A card breaker, working from 60 to 65 kilograms per day.
- 3. Two card finishers to clear the preceding machine, each tended by two boys.
- 4. A machine for spinning at once with thirty spindles, producing from 25 to 30 kilograms of coarse yarns.
- 5. A spinning-machine of forty spindles, spinning with a woman and child 15 kilograms of coarse warp yarns for bed covers.
- 6. A machine of sixty spindles for producing 6 kilograms of yarns for cloth.
- 7. A machine for napping cloths. This machine took the place of twenty nappers by hand.
 - 8. A brushing-machine for ordinary cloths.
- 9. A brushing-machine for narrow cassimeres. Looms with the fly-shuttle were also exhibited.

Such were the principal inventions which, unimportant as they seem now, caused the bulletins of the Society for the Encouragement of the National Industry to declare that a given number of hands at that period would produce forty times as much as towards the close of the last century.

The worsted or combing wool manufacture was slower in receiving improvement. The imperfect methods of hand-combing made the fibre rebellious to mechanical spinning. An imperfect combing-machine was made in 1808, and the first machine for spinning combing wool, which was put in operation in France, was not constructed until 1811. The Collier comber introduced in 1817, and which continued in more or less use for about twenty years, aided in developing the worsted industry.

Our author remarks that about this period, 1817, a serious

brought from twenty departments, were considered remarkable for their variety and excellence. There were cloths so strong as to receive the name of cuirs laine (wool leather); others so light as to be designated as zephyrs and amazones. Bolivars, similar to Welsh flannels, Circassians and populines were conspicuous as novelties. At this period the hand-spinning of yarns for filling had entirely disappeared, but was still used for making the warps of combed wool.

At the Exposition of 1834, machines for making warps of combed wool, and their products, were exhibited. At this period were made the first attempts at automatic weaving; improvements were made in the processes of finishing, including the use of steam vapor for this purpose. The annual production of woollen goods of all kinds was about four hundred millions of francs, nearly equally divided between unnapped and felted goods. The invention of M. Bonjean of fancy cassimeres, or rather the use of the fancy or Jacquard loom in weaving cloths which had before been altogether plain, gave an immense impulse to the woollen industry throughout the world, and caused the most marked of modern changes in the aspect and character of cloths.

At the period of the Exposition, the circular knitting-machines are first spoken of, and are referred to as constituting one of the most remarkable specialties in the mechanical arts. Here an American invention appears upon the field. Our author says, referring to this period: "The industry of carded or fulled stuffs, although less susceptible of modification in its means, had gone on with rapid steps, and had ameliorated the greater part of its machines. The labor of the rattacheur (the workman who spliced together the ends of the separate rolls of wool as they formerly came from the cards), so painful for the children who performed it, and so prejudicial to the perfection of the result, was partially suppressed, thanks to the spinning or American cards. These, instead of furnishing small cylinders or rolls of a length limited to the breadth of the card, and then spliced or fastened together by hand, - rendered the substance under the form of a sliver or continuous yarn." Manufacturers

may be the appearance given to them in the transformation; the stuffs from this origin can never be worth those obtained from virgin wool, as the resistance is diminished by the indispensable transformations which it has had to undergo. With how much greater reason must the tissue lose its resisting power with wool which has been twice submitted to the same operation! Nevertheless, the commerce of shoddy is an admitted fact of the business of our times. filaments resulting from this manufacture - moderately and judiciously employed - can render important service; here, as in most cases, it is the abuse which must be blamed. The shoddy wools, used in a reasonable proportion for certain tissues, for backs of cloths, or for very thick stuffs, if they are not as warm as those of the same weight made from new wool, can, at least, furnish at a low price articles but slightly permeable to water and humidity, and be able, under this form, to render service to a class of consumers compelled to seek cheap goods. The intelligent and conscientious manufacturer can arrive at combinations which are really advantageous in this direction by mixing new and strong, although common wools, with a certain proportion of shoddy. Here is a new path, requiring special and profound knowledge, as well of materials as of transformations, to be pursued with success. We could cite manufacturers who owe to this course a fortune and a deserved reputation. Since the use of these materials has become a necessity, we prefer to make allusion to those who have used them in a judicious and loyal manner than to those who have been tempted to abuse them."

To recur to our historical sketch, it was at this period — 1840—1844 — that the first closed cylindrical fulling machines came into use. By their use the important labor devolving upon them was executed with more precision and certainty, while much economy of room and saving of heat was effected by suppressing the old fulling-machines.

The International Exposition of 1851 gave to the French and English manufacturers the first opportunity to compare their productions. The French were beyond all competitors in the application of merino wools. In products of fine carded wools they have no rivals. They shone above all in their merino dress goods. The processes in the fabrication of these tissues had been so much ameliorated in a quarter of a century that the

the views of M. Alcan as to an invention which opens a new field of labor, both in the wool and cotton manufacture.

The Marquis d'Argenteuil had endowed the Society for the Encouragement of the National Industry with the sum of 40,000 francs, the interest of which, accumulated during six years, should form a prize of 12,000 francs, to be given to the author of the most important discovery for the national industry made during the six years preceding the judgment of the Society. This prize was awarded to Joshua Heilmann, the inventor of the mechanical comber. The report accompanying the award was made by M. Alcan in June, 1857.

Omitting the introductory paragraphs of this report, we translate those more directly bearing upon the invention in question.

"The invention of the combing-machine of Joshua Heilmann, placed by your unanimous suffrage in the first rank, in the conference which is now being terminated, belongs to the class of auxiliary or preparatory machines which change the face of specialties by the importance and extent of the ameliorations which they effect.

"This discovery, the more remarkable because produced in a direction and at an epoch in which genius alone could have foreseen the possibility of new progress, has been conceived with a boldness, and knowledge of combinations and means, which appeared indispensable to attain the end to which Heilmann arrived by his scientific and laborious researches.

"The enunciation of the terms of the problem will determine the exactitude of this appreciation.

"The textile substances present themselves with various characters and in different states. Sometimes they are definite, indivisible organs, forming a thick down composed of fibres eminently flexible, like those of cotton. Sometimes they are long fibres of little elasticity and infinitely divisible, like those of flax and hemp. Among the animal materials, some have the hairs rough and curled, of variable lengths, and so matted and adherent that they present a considerable resistance to penetrability; wools, in general, are in this category. The flax of silk, and some other animal downs (like mohair), on the contrary, have remarkable slippery properties.

"Besides, whatever may be the nature of the substance, it is com-

posed of a mass of knotted fibres of unequal lengths, and crossing in all directions. To sort these filaments, to arrange and purify them, to take out the apparent or microscopic knots and knobs, to unite in a parallel direction those of equal length, finally to divide and fine them when the material permits it,—such is the task reserved for the comber.

"The work by hand had remained in exclusive possession of this delicate operation up to 1830. It is only from this period that serious attempts at automatic combing had been made. Nearly twenty years had elapsed in attempts more or less successful, but whose results were unable to rival those produced by the hand.

"The authors of the numerous systems of combers produced for half a century have had only in view the imitation of the work by hand, and the creation of special machines for each species of filaments. The superiority of manual combing and the diversity of the characters of the raw materials explain the obstinacy with which the most skilled and competent have pursued this path.

"Before Heilmann, no one had supposed that the same system could be applied, without distinction, to different fibres; and much less still that an automatic operation would soon place at a distance the most perfect results exceptionally furnished by the most skilful workmen.

"It is by abandoning these errors of the past that this celebrated inventor has so remarkably succeeded. He has contrived two machines: the one roughs out the work by sorting the material; the other receives the product of the first machine under the form of a roving. The latter breaks up the product of the first machine, straightens and cleanses the fibres almost one by one, re-unites those of equal length, makes them parallel, and solders them together by juxtaposition to make another roving, thoroughly combed. We remark incidentally that by operating upon, as it were, isolated filaments, the author has been able to dispense with the intervention of certain auxiliary elements, indispensable in all other processes, and has been able, for example, to comb wool without the aid of heat.

"The properties of the machine are such that the shortest fibres mingled with impurities, such as the tow, or waste of cotton, before reserved for the action of the card, henceforth have been capable of being combed.

"This entirely new faculty of working with equal success filaments of any length whatever, not only materials usually combed, but also

those which had not been transformed in any manner before the intervention of Heilmann, has been of unhoped-for advantage to the textile industry. Waste of all kinds has become applicable to the finest spinning.

"The inventor ranges, in fact, all the textile substances into a certain number of categories, based upon their lengths, and for which he establishes as well the types or sizes of the sorters and combers. The volume of the organs, the regulation and the amplitude of the movements, are necessarily in proportion to the dimensions of the fibres to be opened.

"The superiority of the new system over those which have preceded it is so marked that its use has been the point of departure of a new phase of progress in the textile arts in general.

"The genius of Heilmann appears to have been summed up in this last work of his life. Geometrical demonstrations, as new as ingenious, expose its principle; many elegant and positive solutions and combinations of details of mathematical precision assure the realization of the work he had proposed.

"The unexpected success of this new method of combing has provoked researches, and given birth to numerous rival efforts; but hitherto the results have either been less perfect, or less general, or the means partake of those of Heilmann. His work, after having traversed the phases more or less difficult, referred, above all, to great discoveries, contributes to the wealth of all the industrial nations of the world. He was more fortunate than most of his predecessors. As soon as foreign piracy thought to avail itself of this invention, did the foreign tribunals confiscate the pirated machines. English justice did not hesitate between duty and a false national pride; it proved in a brilliant manner the rights of the French inventor to the work which others would have stolen. This judgment, celebrated in the industrial annals, will remain as a proof of the impartiality of the English judges, and an irrefutable demonstration of the originality of the invention of our compatriot.

"The working of the new comber dates back only a few years; yet it would be difficult to render an account of the importance of the results obtained, if we did not expose a certain number of facts, showing the progress in different specialties of spinning which are attributable to this invention.

"Application to the Industry of Wools. — Our important industry of glossy wools would have been seriously menaced by the increasing

we so freely accord the initiative in this branch of industry, have been keen to take advantage of the new system of combing. Our neighbors possess, in fact, more than 2,400 combers, and our cotton industry, five times less important, has more than seven hundred and fifty. The other manufacturing nations are entering into this path with the same activity.

"Application to Flax-spinning. — The services rendered to the spinning of flax will soon be as important. The tow which forms nearly half the material as well in quantity as in value, treated in the Heilmann machine, gives threads finer than those with long fibre, and of as high a value. . . .

"This regeneration of materials of insignificant product is, we think, much more than the principal results of the machine, the criterion of the extent of progress. The advance of an industry is almost always in fact in the inverse ratio of the débris which result from it. Is it not by giving to these débris without use, and often even injurious, a serious value, that the special services rendered by the inventor become evident, and that a creative faculty is displayed which should place him in the first rank among mankind?

"The discovery of Heilmann, then, realizes more than was at first expected from it: it gives a new impulse to the mechanical arts, promotes a multitude of researches, supports important establishments for construction, and will soon substitute for all fabrics without nap the perfect method of combing for the incomplete work of the card. It creates, regenerates, and transforms the specialties which owe to it their prosperity. Under whatever aspect we consider it, it commands in an equal degree the esteem of society, the admiration of science, and the recognition of industry."

We might smile at the enthusiasm of this eulogy if we did not remember that Mr. Woodcroft, the chief of the English Patent Office, places Heilmann, for his services in this invention, among the ten men who have most contributed to the present perfection of the textile arts.

The invention of Heilmann, it may be observed, although not generally known under his name in this country, constitutes the essential principle of most of the modern combers; the principle consisting in drawing out the fibre at both ends of the lock of fibrous material, while in the old combers the fibre was drawn at

numerous details and general perfections in the textile arts. Among the most conspicuous improvements in the woollen industry were the machines for cleansing and drying the raw material. The vast increase in the quantity of raw material to be worked up, resulting from the expansion of the woollen industry, had rendered the washing by hand, and the drying in the air, of the old methods insufficient and too slow. Ingenious machines for the rapid and continuous washing and drying of wool were exhibited from England and France. The ventilation - drying the wool by means of hot air - effected the object in one-tenth of the time occupied in the old methods. passage of the material produced by carding, from one machine to another, formerly made by hand, effected spontaneously and automatically by the Apperly attachment, was specially noticed. The self-acting mule-jenny, formerly used only for cotton, was found now to be successfully applied also to wool. Improvements were specially noticeable in knitting-machines. cular machines were found capable of executing with astonishing rapidity pieces from the smallest dimensions up to breadths of twelve vards if necessary, and were also constructed so as to make knit fabrics with great economy, either enlarged or narrowed at will, or of the style commonly known as shaped goods. The straight knitting-frame, called the "French system," whose origin dates back to the seventeenth century, had remained without change up to this time. This system was much esteemed on account of the perfection of its products; but they were quite dear, because only one piece could be knit at once. system was now so modified as to produce automatically six pieces simultaneously, so that each machine takes the place of from twelve to fourteen workmen, without the perfection of the result being in the least diminished. The progress realized in this branch of construction is said to be such that the builders of these machines at Troyes and its environs manufacture for almost all foreign countries.

The progress in the decennial period preceding 1×62 is demonstrated more by commercial than technical evidences. In ten years the number of spindles employed on combed wool

cards, without the necessity of touching the material, to enable it to pass from one machine to another.

The most important results in the improvements of the selfacting mules, which were especially conspicuous at the Exposition, are thus enumerated by our author:—

"The intolerable noise caused by the transmissions has been in a marked degree diminished, while the number of spindles to the machine has been increased. The sudden changes in the rapidity and direction of the movements have been modified and become less noticeable. The cords intended to guide the chariot have been so fitted as not to heat or slip, as they formerly did. A new arrangement in the construction of the chariot prevents the oscillations which took place as it ran backwards and forwards, and especially at the points of arrival and departure, to the great prejudice of the regularity of the spinning. Simple combinations for regulating and allowing the working on the same machine of short or long fibre and of producing the highest or lowest numbers. These improvements have effected an increase of production and a diminution in the proportion of waste, a reduction in the number of workmen and increase of wages, and finally the establishment of a general system for the spinning of different filamentary materials, which is one of the most noticeable features of modern progress."

We have before alluded to the difficulty of reproducing in any detail the technical portions of M. Alcan's work, as the descriptions of machinery would be unintelligible without the drawings which illustrate them. This objection does not apply to his remarks upon the important subject of oiling wools. The views of M. Alcan upon this subject are especially commended to the attention of woollen manufacturers, not only as suggesting an important economy, but the most effectual means of preventing the most dreaded danger in our establishments, so fully discussed by us in a former article upon "Fires in Woollen Mills." In describing in detail the preparatory processes for spinning, he devotes a chapter to



THE OILING OF WOOLS.

"When the hairs of the wool have been suitably disembarrassed. by means of the preceding operations, of the coarser impurities which they contain, it becomes indispensable to thoroughly lubricate them to facilitate the continuation of the work. This temporary lubrification, although very simple in appearance, demands, nevertheless, the realization of very delicate conditions. If the oiling is irregular, the ulterior operations of carding and spinning will be difficult, and the products imperfect. When the fibres are too much lubrified above all, when we make use of emulsions and bad oils, they detach themselves with difficulty from the card clothing machines, and stuff them up very rapidly. If the fibres are insufficiently oiled, they become knotted and break. Wool being the only substance which has absolute need of being oiled in order to be spun, and as the spinning can never be suitably performed without this precaution, we advert at the outset to the cause of this special preparation.

"The general principles before explained have taught us, on the one hand, that the filamentous materials, which are generally very limited in their length, and relatively irregular in form, cannot be transformed into regular threads except by an infinite series of successive slippings over each other, performed in conditions of mathematical regularity; the study of the characters of wool has demonstrated, on the other hand, that the constitution of its fibre is naturally rebellious to this slipping action. The isolated filament can be compared to a body more or less rough on its exterior, which cannot move itself in the desired manner, and not without too much friction, unless the action is aided by some unctuous liquid. The continued transport of a mass of filaments with rough surfaces requires, all things being equal, an amount of oiling in proportion to the number of filaments of the mass, the age of the wool, its more or less normal state at the time of shearing, or, in a word, its flexibility and its elasticity. Old wools, skin wools, and those from diseased animals, deprived of a notable quantity of the liquid which fills the wools of young sheep, and healthy wools in general, lend themselves less easily to transformations, and consequently require a greater quantity of the lubricating material. This necessity of varying the proportions of the oiling is equally observed with the nature and more or less efficacious composition of the oily substance used. . . .

"Olive oil was formerly exclusively used for the manufacture of good intermediary cloth and fine cloth; the oils of the grains sufficed for the manufacture of common cloths; the emulsions which tried to take the place of lubricating with pure oil, and composed of oil and soap and water, or some other alkaline solution in feeble proportions, have always caused a notable augmentation of waste, in consequence of the evaporation of the aqueous portion.

The quantity of these materials introduced into the wool varies with the fineness of the filaments, and the quality of the lubricating material; it increases for the fine wools containing more fibres with the same weight, and diminishes with the limpidity, unctuosity, and purity of the oil and the size of the fibres to be lubricated.

"The quantity of olive oil of Gallipoli, Seville, or Malaga, which is commonly used, is generally one-fifth of the weight of wool to be spun; it rises to one-quarter, when use is made of the oils of the grains, which are always dangerous on account of their drying properties.

"The oil introduced into the wool serving only to facilitate the slipping of the fibres at the time of the carding and spinning, and sometimes to increase the cohesion of the threads in weaving, must necessarily be made to disappear before the application of the dressing processes or the dyeing, if the wool is not already dyed; for without a perfect scouring these last operations can never succeed. We expend, then, an enormous quantity of oil, solely to facilitate a part of the transformations of the filamentous material. This necessity of removing the whole of the oily matter mingled with the wool is not without some practical difficulties, since the point is to separate from the wool an unctuous body which the wool has seized with avidity, and which from its natural qualities is not soluble in any chemical solutions with which the wool can be placed in contact without danger. Thus we are compelled to accomplish the scouring by an effect of absorption, combined with a mechanical action.

"For the scouring of yarns, use is made of solutions of soap, and wringing; for the scouring of the tissues, a diluted argillaceous earth, combined with powerful pressure.

"Either of these processes requires a long time and a considerable expense, and presents, besides, some real difficulties; thus they have been for a long time the most dangerous rock which the fabrication of woollens has had to encounter. The inconveniences of the methods of oiling which we have just indicated do not consist solely in

injurious effect upon the wool, and becomes a great aid in scouring; which operation is performed almost instantaneously and with great perfection and mathematical regularity, thanks to the ready saponification of the oleic acid. This acidity, which opposes itself to the absorption of the air, offers, moreover, the immense advantage of rendering spontaneous combustions impossible.

"The scouring of waste of every description is executed with the same facility and the same economy as that of yarns and tissues.

"The economy of scouring does not consist alone in the promptitude of the execution, and the slight cost of the alkalies which are used; or in the employment of the residues of these scourings as solutions of soap; but above all in the almost absolute suppression of that waste produced at length by the rollers of the scouring-machine upon the stuff, and composed of the finest filaments torn from the tissues. Besides, the cost of oleine is much less than that of the other oils which are furnished in a great part by foreign countries.

"How, then, in view of the important advantages observed during twenty-five years of practice, is it that the oiling by oleine has not everywhere taken the place of the old methods of oiling? Prejudice doubtless was for a long time an obstacle; but it ought to have yielded to evidence, and we must seek elsewhere the cause of the abandonment of oleine by a certain number of manufacturers, whilst other houses have not ceased to use it with success. The exigency of cheap production has encouraged the sale of oleines, insufficiently purified or prepared, and in conditions unfavorable to the oiling of wool. These oils have not only had the effect of compromising the finish and even the solidity of the cloth by impregnating the filaments with products impossible to saponify, which Lecame insurmountable obstacles to scouring, but they have made oleine a bugbear to the working spinners and weavers, whose hands were made sore by these products. This fact is so sure that a house which has learned the causes of the want of success of oleine has obtained a large custom by purifying the material, as we have ourselves formerly done.

COMPARISON OF THE DIFFERENT METHODS OF OILING.

"The different liquids in use are: olive oil, oil of colza, arachide (oil of the American peanut), and oleic acid, improperly called oleine. These oils are employed sometimes pure, sometimes mixed by the spinner or clandestinely by the vendor, and sometimes in a state of

"The operation of scouring the piece of cloth made of wools oiled
with olive oil was conducted generally in the following manner: -

- "There was given to it -
- "1. A first application of fuller's earth for 4 hours.
- "2. Washing with a plentiful supply of water for . . 1
- "3. A second application of the earth for 6 ,,
- "4. Washing with water for 4 ,,
- "The scouring of the other piece of the same cloth, containing oleine, was done in two hours; that is, 1 h. 30 m. with a solution of carbonate of soda, and a washing with abundant water, 30 minutes.
- "There was thus an economy of time of 13 hours, which is enormous, especially if we consider the following consequences in favor of oiling with oleine:—
- "1. An economy resulting from the quantity of water necessary for the washing, and the dispensing with the earth.
 - "2. A considerable quantity of time and motive power.
 - "3. An economy in the waste of the wool.
- "4. An amelioration in the quality, the prolonged action of the earth making the tissue tender.
- "5. The possibility of using the soapy residues resulting from the scouring.
- "6. A considerable facility for scouring and regenerating the waste.
- "In view of these results, which exhibit corresponding advantages for carded yarns and even preparations of the comber, which have oiled with oleine, we have really no need of dwelling upon the other lubricating materials, none of them offering as much advantage or security.
- "Accordingly the greater part of the large manufacturers, as well in France as abroad, who do their own spinning, make use almost exclusively of oleic acid, either pure or in emulsion, and recognize so well the importance of its purification as not to shrink from wasting one or two per cent, to obtain the oleine perfectly limpid and free from sulphuric acid, by means of filtering, washing, and suitable repose. Many manufacturers, who have been able to appreciate practically for many years the progress realized by this application to a very great extent, have assured us that the advantages were

the other, a soapy composition which may be used in its raw state or after having been purified by washing.

- "In this manner the waste of wool is regenerated almost without expense, and can be used anew, realizing its full value.
- "The source of spontaneous combustion disappearing, the amount of insurance on the establishments subject to these disasters can be equitably reduced. We know that very many manufacturers, who have become familiar with the use of purified oleine for oiling, have been struck with this view of the question, and have derived great advantage from its use. But, as many manufacturers are not in this case, we feel the more authorized to recur to the subject; and, although we are the author of the process, its use is nevertheless free to the public."

It will be seen by the preceding paragraph that the application of oleic acid as a lubricating material has made its way very slowly in France, although the discovery of the material and of its application is of French origin. Very extensive inquiries, which we have made upon the subject, assure us that the use of oleic acid is very largely extending among woollen manufacturers in the United States, under the name of elaine. Under this name it is rapidly taking the place of all other materials for oiling wool. Fortunately, the raw material is abundantly supplied in the United States. All oils consist essentially of oleate, margarate, and stearate of glycerine. In the manufacture of stearine candles and of glycerine, olcic acid is a secondary product. Both these manufactures are extensively carried on in this country, Cincinnati being the largest centre of manufacture, where both stearine candles and glycerine are made from tallow and lard oils. Palm oil is principally used for these products in England. The price of oleic acid, or elaine, is from 80 cents to \$1.00 per gallon, consequently much cheaper than olive oil, the last quotations of the latter being \$1.25 currency.

Oleic acid is obtained by three different processes: 1st, an acid saponification; 2d, a lime saponification; 3d, by the decomposition of fatty matter with the use of highly heated steam. When made by the first process, the oleine contains traces of

We are obliged reluctantly to part from M. Alcan on the very threshold of his work. Our readers may judge of the wealth of technical information contained in later chapters, when we state that every process in the woollen manufacture is described with the same detail, and comprehension of the philosophy of procedure, as is exhibited in the chapter upon oiling of wools, which we have reproduced; and that working drawings are given in the atlas of plates, consisting of fifty-seven folios of the most approved machinery and apparatus used in the French mills. The impossibility of transferring these portions of the work to our pages will be apparent to our readers. It is greatly to be regretted, that the very excellence of this work, due in a great degree to its full illustrations, would make the publication of an English version, with the necessary illustrations, so expensive that it is not likely to be translated, and thus made generally accessible to manufacturers.

In considering the treasures of technical knowledge in Europe from which we are shut out by the barrier of the Atlantic, and the still more formidable barriers of foreign languages which are not generally understood by our manufacturing countrymen, for the best technical literature is French or German, — the inquiry is forced upon us, How is it possible, with our present limited sources of knowledge, for our people to make the attainments in manufactures which our national pride and the advancing taste of our community demand? It is idle to suppose that the arts in a high state of advancement can be purely indigenous in any A country without exotic arts would be as barren as a garden possessing only indigenous fruits and flowers. European nations have immense advantages in facilities of communication, and in the great international expositions so readily accessible. Comparatively few of our manufacturers travel abroad, and the overseers and heads of special working departments, who are to manufactories what non-commissioned officers are to an army, the mainstays of their efficiency, never do. importation of foreign workmen, mere workmen, is not sufficient to supply our deficiency. The importation of more intelligent foreign overseers is rendered disadvantageous by the jealousy of

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